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**FIGURE 2155**

TAGGGCGGTGCGTAATTTCGGCACGAGGGCGCTCACGTATGCCGGCGGTCAAGTGGTCCAGGTCCCTTATTCTGCC  
TTCTCCTCCTGCTCCTGGACCCCAAGCCCTGAGACGGGGTGTCTCCTCTACGCAGGTTTGAGTACAAGCTCA  
GCTTCAAAGGCCCAAGGCTGGCATTGCCTGGGGCTGGAATACCCTTCTGGAGCCATCATGGAGACGCCATCCTGG  
GCCTGGAGGAAGTGCCTGCTGACGCCATCCATGAGGAACCGGAGTGGCGCCGTGTGGAGCAGGGCCTCTGTCCCT  
TCTCTGCCTGGGAAGTAGAGGTGCAATGAGGGTGCAGGGACTGGGGCGCCGGGGAGCCACGGCATGGCCGTGT  
GGTACACCCGGGGCAGGGGCCATGTAGGCTCTGTCTTGGGGGGCTGGCTTCGTGGGACGGCATCGGGATCTTCT  
TTGACTCTCCGGCAGAGGATACTCAGGACAGTCTTGCATCCGTGTGTGGCCAGGACGGGCACATCCCCCTCTG  
AGCAGCCTGGGGATGGAGCTAGCCAAGGGCTGGGGCTCTGTCTATTGGGACTTCCGGAACCGGCCACACCCCTTCA  
GAGCAGCGATCACCTACTGGGGGCAGAGGCTGCGCATGTCTTGAACAGTGGCCTCACTCCAGTGATCCAGGTG  
AGTTCTGTGTGGATGTGGGGCCCTGCTTTTGGTCCCTGGAGGTTTCTTTGGGGTCTCAGCAGCCACCGGCACCC  
TGGCAGATGATCATGATGTCTGTCTTCTGACCTTCAGCCTGAGTGAGCCAGCCAGAGGTTCCCCCTCAGC  
CCTTCTGGAGATGCAGCAGCTCCGCCCTGGCGAGGAGCTGGAAGGGCTGTGGGCAAGGCTGGGCTTGGGCACCA  
GGGAGGATGTAACCTCCAAAATCAGACTCTGAAGCTCAAGGAGAAGGGGAAAGGCTCTTTGACCTGGAGGAGACGC  
TGGGCAGACACCGCCGATCCTGCAGGCTCTGCGGGGTCTCTCCAAGCAGCTGGCCCAGGCTGAGAGACAATGGA  
AGAAGCAGCTGGGGCCCCCAGGCCAAGCCAGGCTGACGGAGGCTGGGCCCTGGATGCTTCTGCCAGATTCCAT  
CCACCCAGGGAGGGGTGGCCACCTCTCCATGTCACTCAATAAGGACTCTGCCAAGGTCGGTGCCCTGCTCCATG  
GACAGTGGACTCTGTCTCAGGCCCTGCAAGAGATGAGGGATGCAGCTGTCCGATGGCTGCAGAAGCCCAGGTCT  
CCTACCTGCCTGTGGGCATTGAGCATCATTCTTAGAGCTGGACCACATCCTGGGCCTCCTGCAGGAGGAGCTTC  
GGGGCCCGGCGAAGGCAGCAGCCAAGGCCCCCCCGCCACCTGGCCAGCCCCCAAGGGCCTCCTCGTGCCTGCAGC  
CTGGCATCTTCTGTTCTACCTCCTCATTGAGACTGTAGGCTTCTTCGGCTACGTGCACTTCAGGCAGGAGCTGA  
ACAAGAGCCTTCAGGAGTGTCTGTCCACAGGCAGCCTTCTCTGGGTCTGCACCACACACCCCCAGGGCCCTGG  
GGATTCTGAGGAGGCAGCCTCTCCCTGCCAGCATGCCTGCCCTGACCCACCTCAGAGCCTGCTTTGCATCACTGGG  
AAGCAGGCAGTGTCTTGGGTGGGGGCTTGGTCAGTATCCTCTCCGTCTGGGTGCCAGCTCCACGCACACCTGA  
GCTTTCGGCATGCTCCACCTCGTTAAAGGTGATTTCCCTCTCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

A

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**FIGURE 2156**

MPAVSGPGPLFCLLLLLLDPHSPETGCPPLRRFEYKLSFKGPRLALPGAGIPFWSHHGDAILGLEEVRLTPSMRN  
RSGAVWSRASVPFSAWEVEVQMRVTGLGRRGAHGMVWYTRGRGHVGSVLGGLASWDGIGIFFDSPAEDTQDSPA  
IRVLASDGHIPSEQPGDGASQGLGSCHWDFRNRPHPFRRARITYWGQRLRMSLNSGLTPSDPGEFCVDVGPIIIIVP  
GGFFGVSAATGTLADDHDVLSFLTFSLSPEVPPQPFLEMQLRLARQLEGLWARLGLGTREDVTPKSDSEAO  
GEGERLFDLEETLGRHRRILQALRGLSKQLAQAEQWKKQLGPPGQARPDGGWALDASCQIPSTPGRGGHLSMSL  
NKDSAKVGALLHGQWTLQALQEMRDAVRMAEAQVSYLPVGIHHFLELDHILGLLQEEIRGPAKAAAKAPRP  
PGQPPRASSCLQPGIFLFYLLIQTVGFFGYVHFRQELNKSLECLSTGSLPLGPAPHTPRALGILRRQPLPASMP  
A

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**FIGURE 2157**

AACAACTGCACCCACTGAACTCCGCAGCTAGCATCCAAATCAGCCCTTGAGATTGAGGCCTTGAGACTCAGG  
AGTTTTGAGAGCAAAATGACAAACACCCAGAAATTCAGTAAATGGGACTTTCTGGCAGAGCCAATGAAAGGCCCT  
ATTGCTATGCAATCTGGTCCAAAACCACTCTTCAGGAGGATGTCTTCACTGGTGGGCCCCACGCAAAGCTTCTTC  
ATGAGGGAATCTAAGACTTTGGGGGCTGTCCAGATTATGAATGGGCTCTTCCACATTGCCCTGGGGGGTCTTCTG  
ATGATCCCAGCAGGGATCTATGCACCCATCTGTGTGACTGTGTGGTACCCTCTCTGGGGAGGCATTATGTATATT  
ATTTCCGGACTACTCCTGGCAGCAACGGAGAAAACTCCAGGAAGTGTGTTGGTCAAAGGAAAAATGATAATGAAT  
TCATTGAGCCTCTTTGCTGCCATTTCTGGAATGATTCTTTCAATCATGGACATACTTAATATTAAATTTCCCAT  
TTTTTAAAAATGGAGAGTCTGAATTTTATTAGAGCTCACACACCATATATTAACATATACAACGTGAACCAGCT  
AATCCCTCTGAGAAAACTCCCCATCTACCCAATACTGTTACAGCATAACAATCTCTGTTCTTGGGCATTTTGTCA  
GTGATGCTGATCTTTGCCTTCTTCCAGGAACCTTGAATAGCTGGCATCGTTGAGAATGAATGGAAAAGAAGTGC  
TCCAGACCCAAATCTAACATAGTTCTCCTGTGAGCAGAGAAAAAAGAACAGACTATTGAAATAAAAGAAGAA  
GTGGTTGGGCTAACTGAAACATCTTCCCAACCAAGAATGAAGAAGACATTGAAATTATTCCAATCCAAGAAGAG  
GAAGAAGAAGAAACAGAGACGAACCTTCCAGAACCTCCCCAAGATCAGGAATCCTCACCAATAGAAAATGACAGC  
TCTCCTTAAAGTGATTCTTCTGTTTTCTGTTTCCTTTTTTAAACATTAGTGTTTCATAGCTTCCAAGAGACATGCT  
GACTTTCATTTCTTGAGGTACTCTGCACATACGCACCACATCTCTATCTGGCCTTTGCATGGAGTGACCATAGCT  
CCTTCTCTCTTACATTGAATGTAGAGAAATGTAGCCATTGTAGCAGCTTGTGTTGTCACGCTTCTTCTTTGAGCA  
ACTTTCTTACACTGAAGAAAGGCAGAATGAGTGCTTCAGAATGTGATTTCTACTAACCTGTTCTTTGGATAGGC  
TTTTTAGTATAGTATTTTTTTTTGTCATTTCTCCATCAGCAACCAGGGAGACTGCACCTGATGAAAAGATATA  
TGACTGCTTCATGACATTCCTAAACTATCTTTTTTTTATCCACATCTACGTTTTTGGTGGAGTCCCTTTTGCAT  
CATTGTTTTAAGGATGATAAAAAAATAACAACCTAGGGACAATACAGAACCCATTCCATTTATCTTTCTACAG  
GGCTGACATTGTGGCACATTCTTAGAGTTACCACACCCCATGAGGGAAGCTCTAAATAGCCAACACCCATCTGTT  
TTTTGTAAAAACAGCATAGCTT

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**FIGURE 2158**

MTTPRNSVNGTFLAEPKGPAMQSGPKPLFRRMSSLVGPTQSFFMRESKTLGAVQIMNGLFHIALGGLLMIPAG  
IYAPICVTWVYPLWGGIMYIISGSLLAATEKNSRKCLVKGKMIMNSLSLFAAISGMILSIMDILNIKISHFLKME  
SLNFIRAHTPYININCEPANPSEKNSPSTQYCYSIQSLFLGILSVMLIFAFFQELVIAGIVENEWKRTCSRPKS  
NIVLLSAEEKKEQTIEIKEEVVGLTETSSQPKNEEDIEIPIQEEEEETETNFPPEPPQDQESSPIENDSSP



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**FIGURE 2159**

CTTGAGAGGCTCTGGCTCTTGCTTCTTAGGCGGCCCGAGGACGCCATGGCCGAGTGCCCGACACTCGGGGAGGCA  
GTCACCGACCACCCGGACCGCTGTGGGCCTGGGAGAAGTTCGTGTATTTGGACGAGAAGCAGCACGCCTGGCTG  
CCCTTAACCATCGAGATAAAGGATAGGTTACAGTTACGGGTGCTCTTGCGTCGGGAAGACGTCGTCTCGGGGAGG  
CCTATGACCCCCACCCAGATAGGCCCAAGCCTGCTGCCTATCATGTGGCAGCTCTACCCTGATGGACGATACCGA  
TCCTCAGACTCCAGTTTCTGGCGCTTAGTGTACCACATCAAGATTGACGGCGTGGAGGACATGCTTCTCGAGCTG  
CTGCCAGATGACTGATGTATGGTCTTGGCAGCACCTGTCTCCTTTACCCCCAGGGCCTGAGCCTGGCCAGCCTAC  
AATGGGGATGTTGTGTTTCTGTTCACCTTCGTTTACTATGCCGTGTGTCTTCTCCACCACGCTGGGGTCTGGGAGG  
AATGGACAGACAGAGGATGAGCTCTACCCAGGGCCTGCAGGACCTGCCTGTAGCCCACTCTGCTCGCCTTAGCAC  
TACCACTCCTGCCAAGGAGGATTCCATTTGGCAGAGCTTCTTCCAGGTGCCAGCTATACCTGTGCCTCGGCCTT  
TCTCAGCTGGATGATGGTCTTCAGCCTCTTTCTGTCCCTTCTGTCCCTCACAGCACTAGTATTTTCATGTTGCACA  
CCCACTCAGCTCCGTGAACTTGTGAGAACACAGCCGATTACCTGAGCAGGACCTCTGAAACCTGGACCAGTGG  
TCTCACATGGTGCTACGCCTGCATGTAAACACGCCTGCAAACGCTGCCTGCCGGTAAACACGCCTGCAAACGCTG  
CCTGCCCCGTAAACACGCCTGCAAACGCTGCCTGCCCACACAGGTTACGTGCAGCTCAAGGAAAGGCCTGAAAGG  
AGCCCTTATCTGTGCTCAGGACTCAGAAGCCTCTGGGTGAGTGGTCCACATCCCGGGACGCAGCAGGAGGCCAGG  
CCGGCGAGCCCTGTGGATGAGCCCTCAGAACCCTTGGCTTGGCCACGTGGAAAAGGGATAGAGGTTGGGTTTCCC  
CCCTTTATAGATGGTCACGCACCTGGGTGTTACAAAGTTGTATGTGGCATGAATACTTTTTGTAATGATTGATTA  
AATGCAAGATAGTTTATCTAACTTCGTGCGCAATCAGCTTCTATCCTTGACTTAGATTCTGGTGGAGAGAAGTGA  
GAATAGGCAGCCCCCAATAAAAAATATTCATGGAAAAAAAAAAAAAAAAA

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**FIGURE 2160**

MAECPTLGEAVTDHPDRLWAWKEFVYLDEKQHAWLPLTIEIKDRLQLRVLLRREDVVLGRPMTPTQIGPSLLPIM  
WQLYPDGRYRSSDSSFWRLLVYHIKIDGVEDMLLELLPDD

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**FIGURE 2161A**

GGCACTGTGTTACCAGCAGAGAGACAGGGCAAGCAGAATGTGCCTGTATGGACCTTTGCAAACGTCACCTACAAAC  
CTGTGTGTGGATCTGACGGAGAATTCTATGAAAACCACTGTGAAGTGCACCGAGCTGCTTGCCCTGAAAAACAAA  
AGATTACCATTGTTTACAAATGAAGACTGCTTTTAAAGGAGATAAGTGAAGACTACTGAATGCAGCAAGATGA  
AAAATATGCTATTAGATTTACAAAATCAAAGATATATTATGCAAGAAAATGAAAATCCTAATGGCGACGACATAT  
CTCGGAAGAAGCTATTGGTGGATCAAATGTTTAAATATTTTATGATGCAGACAGTAATGACTTGTAGATATTAATGA  
ACTAACTCAGGTGATAAAACAGGAAGAAGCTTGGCAAGGATCTCTTTGATTGTACTTTGTATGTTCTATTGAAATA  
TGATGATTTTAAATGCTGACAAGCACCTGGCTCTTGAAGAATTTTATAGAGCATTCCAAGTGATCCAGTTGAGTCT  
GCCAGAAGATCAGAACTAAGCATCACTGCAGCAACTGTGGGACAAAGTGTGTTCTGAGCTGTGCCATTCAAGG  
AACCCTGAGACCTCCCATTATCTGGAAAAGGAACAATATTATCTAAATAATTTAGGTTTGGGAAGACATCAATGA  
CTTTGGAGATGATGGGTCCTTGATATTACTAAGGTTACCACAACCTCACGTTGGCAATTACACCTGCTATGCAGA  
TGGCTATGAACAAGTCTATCAGACTCACATCTTCCAAGTGAATGTTTCTCCAGTCATCCGGGTGTATCCAGAGAG  
TCAGGCTAGAGAGCCTGGGGTAACTGCCAGTCTTAGGTGCCATGCAGAGGGCATAACCAAGCCTCAGCTTGGCTG  
GTTGAAGAATGGAATTGATATTACACCAAAGCTTTCCAACAACCTCACGTTCAAGCAAATGGCAGTGAGGTTCA  
CATAAGCAATGCGCTATGAAGATACTGGAGCATAACCTTGATCGCAAAGAATGAAGCAGGAGTGAGTGAAGA  
CATCTCTTCTCTTTTGTGGAAAGACTCTGCTAGAAAAGACCCTAGCTAACATATTATGGAGAGAAGAAGGTCTGGG  
AATTGGGAACATGTTCTATGTTTTTATGAAGATGGAATCAAAGTGATACAACCCATAGAATGTGAATTTTCAGAG  
GCACATTAAGCCTAGTGAAAAGCTCCTTGGATTTCAGGATGAAGTCTGTCCCATAGCTGAGGGAGATGAAGTTCA  
GAGGTGTGTGTGGGCATCAGCTGTTAATGTCAAAGACAAGTTCATTTATGTTGCACAGCCAACCTTGGACAGAGT  
CCTTATTGTTGATGTGCAGTCCCAAAAAGTTGTTTCAGGCAGTGAGCACAGACCCTGTCCAGTTAAATTACACTA  
TGACAAATCACATGATCAGGTCTGGGTGCTAAGCTGGGGTACCTTGGAGAAGACATCACCACACTACAGGTAAT  
TACCCTGGCCAGTGGGAATGTGCCTCACCACAGATCCACACCCAACAGTGGGAAAGCAATTTGACAGAGTGGA  
TGATTTTTTTCATTCCCACCACAACACTCATTATCACCATATGAGGTTTGGATTTATCTTCATAAAGATGAAGC  
TGCACTACAAAAAATTGATCTTGAAACCATGTCATACATCAAGACAATTAACCTGAAGGACTATAAGTGCCTTCC  
TCAGTCATTGGCATATACACACTTGGGAGGCTACTACTTCATTGGCTGCAAACCTGACAGCACCGGAGCAGTTTC  
CCCACAGGTCATGGTGGACGGTGTAACTGACTCAGTCATTGGGTCAATAGTGATGTGACGGGCCTCCATATGT  
CTCTCAGATGGCCACTACCTTGTGAGCATTAAATGATGTGAAAGGCTTGTAAGGGTTCAGTACATTACCATCAG  
AGGAGAAATACAGGAGGCTTTTGATATTTACACAAATCTGCACATATCTGATCTGGCATTTCACCATCCTTTAC  
TGAAGCCCAACATATAACATCTACGGTAGTTCAAGCACACAACTGATGTGCTCTTTGTGGAGCTCTCTCTGG  
GAAGGTCAAGATGATAAAGAGTCTCAAGGAACCACTCAAGGCAGAAGAATGGCCTTGAACAGGAAAAACAGGCA  
AATCCAGGACAGTGGCTTGTGTTGTTCAATACCTGATGACACCTTCCAAGGACTCTCTCTTCATCCTAGATGGACG  
ACTCAATAAATTAACCTGTGAGATCACTGAAGTTGAAAAGGAAATACAGTCATTGCGTTGGAGATGCCTAAAA  
ACCCTACGATACAATTATTGAATGAAGCGTTTTACAATACATTGCCTTAATCCATTGTTTAAATTTACAACCTTA  
ACTTTCCAAGTTTATATCCTAGTCAAACAAAATTTACTTGGTTGGTCCAAATAAAATAAATGTTTTTGACTAAG  
TGACTAAGACATACACAATTAATTATATTGGTTAATTAGAAATACAGCACAAATATTAAATGAGAAATCACATC  
AGTCACAAGAATCAAATATGTAAATTATGCTTTAAACAATAAAGTAGGATTTAAATCATTTAAAAAATAAAGTGA  
CAGGGAATTTAGATGACATAAAGCATTATTTTCAATTTGAGGGTAGTTTATTCTTTTTCTGTCTCTTTTGGTAT  
GATTAAACAAGAAATACAAGGTGTTGTGGAACCTTAAATTTCTTAATTCAAAATATTCGGTCTGTCCACTGTTT  
ATAATATTTGTGCCTTGAAGGGAATGTCACAGGAGGAAAAGGAAGACTAAAGCCTGCATACTAAATGTCTCAT  
AACTATAAATCTCTTGTGTTAAAAACATCTCTTGCAACCAATCCTGTCTTCAGCCTTTTGTTTAACCTCAAT  
GAACTACCAATTGAAGGCATAAGTTGGTCTTAGGTTGTATACAGGTGTCAAACCTCCACTTGACATTTACTGTGTA  
ATCTGCAGCATGCTATAGAAAGTGGGGAGGAAGGGAGGAAAAATAATTACAGTCAAAATATTTGCAATCTGTCTA  
CTCATTTTGCTTTCAATCACTAGAGTGCAATATGTTTTTAAATGCAAGTTTGTCTGGGATGTCAACTGCCTACAGA  
TGTTTTATTACTAGCAGAATAGATTATTTATTAATAGATTGTTTCTTTTCATATAGTCCATGTTTCATCATCAGG  
AACTTTTCGGTTTTTAAAAAGAAACATTACTTTTGTCTGCTAAAGTAAACCATATATAGGGAAATTAACACCTAGG  
AAAAGAAAAGTGGCAAGTGAATTGATGAGGTATTAGTGGCTTAGAAGAATTAGTAATATAAGTTGGGAATAAAGG  
GGTAGCCCGACAGTGGTAAGTAAAAATGTAGTACTCCATTGTTTTTGTCTATTAAATATAATGTATCAAAAACCT  
TTATTCTAAAAATTTCCACAAATGATTCTTTTATCCATCTTCTGTAATCCTAAAAGCATCTTCTCACTATGTGC  
TGCAGTTTGAACCTAACGAATCCTCCTACTTGAGACACTGTAGAAAAGTAAAAATGTTGCTTCTGTTTTGTTT

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**FIGURE 2161B**

TAAGAGGAAATGAGAAGGCCAGCAGAAGTAGATTAAACTAGAGAGCTGGTTTATTAAATAAGCAGATAATTAT  
CCAGGCTTAAAGTAATAGCTTACATGTTTTGAAATCCTTGACTTATTTTGTGTTTTATTGTTGCAAAAAATG  
TTAATGGGCTGTTGAAATGACCTCCATTTACTTAAGGTAATCCAATAAGGTCTTTTTTAAATATACAAATTTAC  
TCAAGTTTAAATTGTATAAACTGCTTAGAAACCTGAAATTTTATAGTGTGTAATATCTTATGTGTATATAGCAT  
CCTGAGCTGTGTGATACAGTAGATTTCTTCTTAGCAGAAACATGCGAGGTAGACTTAATAAACAACAAAAATCAG  
CTTATGTTTCTACTTATTGAATCTGCTTTACTTTTTAGCAATTTTCTTCCTTGGAACATGAACCATATAAAGTG  
TCTGTGACTTAATGATTTTCATGTAAGTCTGTGCGATACATCCTTCTTTGTAGCTTACACCATGTGGATGCTCTG  
TCTGTAGACACTGCTTGATAAAAGGAGAATAAACCTCTTACATTTTAAAAAAAAAAAAAAAAAAAA

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**FIGURE 2162**

GGATTTTTAAAAATGAGTGACACCACATGGTTCTCTTCAAAGATGTAACTGCTAGGGTGTGTTGGATGCAAGCTG.  
AAATCACCTTTAAGAAGCCCATGCCTACCAAGGTGGTTTTTCATGAGCCTATGCAAAAGTTTCTGGGACTGTGGGC  
TTGTAGCCCTGGATGACATTACAATACAATTGGGAAGCTGCTCATCTTCAGAGAACTTCCACCTCCACCTGGAG  
AGTGTAATTTTCGAGCAAGATGAATGTACATTTACTCAGGAGAAAAGAAACCGGAGCAGCTGGCACAGGAGGAGGG  
GAGAAACTCCCACTTCTACACAGGACCAAAGGGAGATCACACTACTGGGGTAGGCTACTACATGTACATTGAGG  
CCTCCCATATGGTGTATGGACAAAAGCACGCCTCTTGTCCAGGCCTCTGCGAGGAGTCTCTGAAAACACTGCT  
TGACCTTTTTCTACCACATGTATGGAGGGGCACTGGCCTGCTGAGTGTATCTGAAAAGGAAGAAGACAGTG  
AAGAGTCCCTCTTATGGAGGAGAAGAGGTGAACAGAGCATTTCCTGGCTACGAGCACTGATTGAATACAGCTGTG  
AGAGGCAACACCAGATAATTTTTGAAGCCATTGAGGAGTATCAATAAGAAGTGATATTGCCATTGATGATGTTA  
AATTCAGGCAGGACCTGTGGAGAAATGGAAGATACAACCAATCATCAGGATATTCTGAGGACTTAAATG  
AAATTGAGTATTAAGAAATGATCTGCATTGGATTTACTAGACGAAAACCATACTCTCTTCAATCAAAATGAAAA  
CAAAGCAAATGAATACTGGACAGTCTTAACAATTTTATAAGTTATAAAATGACTTTAGAGCACCTCCTTCATTA  
CTTTTGCAAAAACATACTGACTCAGGGCTCTTTTTTCTTTTGCATATGACAACTGTTACTAGAAATACAGGCT  
ACTGGTTTTGCATAGATCATTCATCTTAATTTTGGTACCAGTTAAAAATACAAATGTACTATATTGTAGTCATTT  
TAAAGTACACAAAGGGCACAATCAAAATGAGATGCATCTATTTAAATCTGCATTGAGTGAATGTATTGGGAGAAA  
AATAGGTCTTGCAGGTTTCCTTTTGAATTTTAAAGTATCATAAATATTTTTTAAAGTAAATAATACGGGGTGTGAGT  
AATATCTGCAGAATGAATGCAGTCTTTCATGCTAATGAGTTAGTCTGGAAAAATAAAGTCTTATTTTCTATGTTT  
TATTCATAGAAATGGAGTATTAATTTTTAATATTTTACCATATGTGATAACAAAGGATCTTTCATGAATGTCCA  
AGGGTAAGTCAGTATTAATTAATGCTGTATTACAAGGCAATGCTACCTTCTTATTCCCCCTTGAACCTACCTTT  
GAAGTCACTATGAGCACATGGATAGAAATTTAACTTTTTTTTGTAAAGCAAGCTTAAATGTTTATGTATACATA  
CCCAGCACTTTTATAAATGTGTTAAACAATTTTACTGATTTTATAATAAATATTTTGGTAAGATTTTGAATAA  
TATGAATTCAGGCAGATATACTAACTGCTTTTATTACTTGTGTTAGAAAATTGTATATATATGTTTGTGTATCC  
TAACAGCTGCTATGAAATTATAAAATTACCTAATAAAAATAATTGAAAATCTTAAAAAAAAAAAAAAAAAAAAAA  
AA

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**FIGURE 2163**

MQAEITFKKPMPTKVVFMSLCKSFWDGGLVALDDITIQLGSCSSSEKLPPPPGECTFEQDECTFTQEKRNRSSWH  
RRRGETPTSYTGPKGDHTTGVGYYMYIEASHMVYQKARLLSRPLRGVSGKHCLTFFYHMYGGGTGLLSVYLKKE  
EDSEESLLWRRRGEQSISWLRALIEYSCERQHQIIFEAIRGVSIIRSDIAIDDVKFQAGPCGEMEDTTQQSSGYSE  
DLNEIEY

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**FIGURE 2164**

TGGTGGCCGGAGGCATTACCATCCTACACCCCTTCATGGCTGCCTCCAGGCCCTTCTTCAGGGACATCGTTTTCT  
ACATGGTGGCTGTGTTCTTGACCTTCCTCATGCTCTTCCGTGGCAGGGTCACCCTGGCATGGGCTCTGGGTACCT  
TGGGCTTGATGTGTTCTATGTGGTCACTGTGATTCTCTGCACCTGGATCTACCAACGGCAACGGAGAGGATCTC  
TGTTCTGCCCCATGCCAGTTACTCCAGAGATCCTCTCAGACTCCGAGGAGGACCGGGTATCTTCTAATACCAACA  
GCTATGACTACGGTGATGAGTACCGGCCGCTGTTCTTCTACCAGGAGACCACGGCTCAGATCCTGGTCCGGGCCC  
TCAATCCCTGGATTACATGAAGTGGAGAAGGAAATCAGCATACTGGAAAGCCCTCAAGGTGTTCAAGCTGCCTG  
TGGAGTTCCTGCTGCTCCTCACAGTCCCGTCGTGGACCCGGACAAGGATGACCAGAACTGGAAACGGCCCCCTCA  
ACTGTCTGCATCTGGTTATCAGCCCCCTGGTTGTGGTCTGACCCTGCAGTCGGGGACCTATGGTGTCTATGAGA  
TAGGCGGCCCTCGTTCCCGTCTGGGTGCTGGTGGTGCAGGCACAGCCTTGGCTTCAAGTACCTTTTTTGCCA  
CATCTGACAGCCAGCCCCCAGGCTTCACTGGCTCTTTGCTTCTGAGGCTTCTGACAGCGCCCTGTGGATCA  
ACGCGGCCGCCACAGAGGTGGTGAACATCTTGCGGTCCCTGGGTGTGGTCTTCCGGCTGAGCAAACTGTGCTGG  
GGCTCACGCTGCTGGCCTGGGGGAACAGCATTGGAGATGCCTTCTCGGATTTCACTGGCTCGCCAGGGCTACC  
CACGGATGGCGTTCTCCGCTGCTTTGGCGGCATCATCTTCAACATCCTCGTGGGTGTGGGGCTGGGCTGCCTGC  
TCCAGATCTCCCGAAGCCACACAGAAGTGAAGCTGGAGCCAGACGGACTGCTGGTGTGGGTCTTGGCAGGCGCCC  
TGGGGCTCAGCCTCGTCTTCTCCCTGGTCTCAGTCCATTGCAGTGCTTCCAGCTCAGCAGAGTCTATGGCTTCT  
GCCTGCTCCTCTTCTACCTGAACCTTCTTGTGCTGGCCCTCCTCACTGAATTTGGAGTGATTACCTGAAAAGCA  
TGTTGACTGAAGCCGCTTAGTGCTGTGGCCTCACTGCAGGCAGGAGCCCCGCCCTCCTGCCGGGGAGGCCCAGG  
GACCGGAGCATTCTGCAAGGCCCTTGTGGGCACGAGAGTGCGGCCCTTGCTGCTGGAGATCTGAGGTCACTGCT  
GTGAGCTGGGAGAACTGCTGTGTACCTCTTGCTGCCAGCACCAACAGCCTTGCCGTGGGGACCTTGGAACCTG  
GCTTTGCTCTGGACAAAGGGTTCAGAGAGAAGCTAGAAGTCCCCCTTGAATGACCCCCAGAGCCCTCTGAGAA  
GGGCTGGAGTTTGGGGGAAGGGGATGGCTGGATGTGCTCCAGGCCATGCTGGAGGTACCCCCAGGCACAGGCAC  
TGCCCGTTCCCTTGCTGGGCTTCAAGCCTTCTGGCACCTTCTCAGGACACAAGTGGCTGCCCAACCTGACTC  
AGAGAATGAGGGTGGCTTGGACCCCTGGGAATCAGGCCGCCGAGGGCTGAGCTCCAGAGCCGCACCATCTGCCAC  
AAACAGAATTCGAGACATACTTAATTTGAATTTCTCCTTGCCACGTTAATAAAGCCAAAAGCAGCGGGTGCTAA  
AAAAAAAAAAAAAAAAAAAA

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**FIGURE 2165**

MAASRPFFRDIVFYMVAVFLTFLMLFRGRVTLAWALGYLGLYVFYVVTVIILCTWIYQRRGSLFCMPVTPPEIL  
SDSEEDRVSSNTNSYDYGDEYRPLFFYQETTAQILVRALNPLDYMKWRRKSAYWKALKVFKLPVEFLLLLTVPVV  
DPDKDDQNWKRLNCLHLVISPLVVVLTLSQSGTYGVYEIGGLVPVWVVVVIAGTALASVTFFATSDSQPPRLHWL  
FAFLGFLTSALWINAAATEVVNLRSLGVVFRLSNTVLGLTLLAWGNSIGDAFSDFTLARQGYPRMAFSACFGGI  
IFNILVGVLGCLLQISRSHTEVKLEPDGLLVWVLAGALGLSLVFSVSVPLQCFQLSRVYGFCLLLFLNFLVV  
ALLTEFGVIHLKSM



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**FIGURE 2166A**

AAGACAACGTCACTAGCAGTTTCTGGAGCTACTTGCCAAAGGCTGAGTGTGAGCTGAGCCTGCCCCACCACCAAGA  
TGATCCTGAGCTTGCTGTTTCAGCCTTGGGGGCCCCCTGGGGCTGGGGGCTGCTGGGGGCATGGGGCCAGGCTTCCA  
GTACTAGCCTCTCTGATCTGCAGAGCTCCAGGACACCTGGGGTCTGGAAGGCAGAGGCTGAGGACACCAGCAAGG  
ACCCCGTTGGACGTAACCTGGTGGCCCTACCCAATGTCCAAGCTGGTCACCTTACTAGCTCTTTGCAAAACAGAGA  
AATTTCCTCATCCACTCGCAGCAGCCGTGTCCGAGGGAGCTCCAGACTGCCAGAAAGTCAAAGTCATGTACCGCA  
TGGCCCAACAGCCAGTGTACCAGGTCAAGCAGAAGGTGCTGACCTCTTTGGCCTGGAGGTGCTGCCCTGGCTACA  
CGGGCCCCAAGTGGCAGCACCACGATTCCATGGCAATCCCTGAGCCTGCAGATCCTGGTGACAGCCACCAGGAAC  
CTCAGGATGGACCAGTCAGCTTCAAACCTGGCCACCTTGTCTGAGTGTCAATGAGGTTGAGGTGCAACAGGAAC  
AGCAGGAACATCTGCTGGGAGATCTCCAGAATGATGTGCACCGGGTGGCAGACAGCCTGCCAGGCCTGTGGAAAG  
CCCTGCCCTGGTAACCTCACAGCTGCAGTGATGGAAGCAAATCAAACAGGGCACGAGTTCCTGTATAGATCCTTGG  
AGCAGGTGCTGCTACCCACGTTGGACACCTTCTTACAAGTGCATTTACGCCCCATCTGGAGGAGCTTTAAACCAA  
GCCTGCACAGCCTTACCCAGGCCATAAGAAACCTGTCTCTTGACGTGGAGGCCAACCGCCAGGCCATCTCCAGAG  
TCCAGGACAGTGCCGTGGCCAGGGCTGACTTCCAGGAGCTTGGTGCCAAATTTGAGGCCAAGGTCCAGGAGAACA  
CTCAGAGAGTGGGTGAGCTGCGACAGGACGTGGAGGACCGCTGCACGCCAGCACTTTACCTGCACCGCTCGA  
TCTCAGAGCTCCAAGCCGATGTGGACACCAAATTGAAGAGGCTGCACAAGGCTCAGGAGGCCCCAGGGACCAATG  
GCAGTCTGGTGTGGCAACGCCTGGGGCTGGGGCAAGGCCCTGAGCCGGACAGCCTGCAGGCCAGGCTGGGCCAGC  
TGCAGAGGAACCTCTCAGAGCTGCACATGACCACGGCCCGCAGGGAGGAGGAGTTGCAGTACACCTGGAGGACA  
TGAGGGCCACCTGACCCGGCAGCTGGATGAGATCAAGGAAGTGTACTCCGAATCGGACGAGACTTTTCGATCAGA  
TTAGCAAGGTGGAGCGGCAGGTGGAGGAGCTGCAGGTGAACCACACGGCGCTCCGTGAGCTGCGCGTGATCTCTGA  
TGGAGAAGTCTCTGATCATGGAGGAGAACAAGGAGGAGGTGGAGCGGCAGCTCCTGGAGCTCAACCTCACGCTGC  
AGCACCTGCAGGGTGGCCATGCCGACCTCATCAAGTACGTGAAGGACTGCAATTGCCAGAAGCTCTATTTAGACC  
TGGACGTATCCGGGAGGGCCAGAGGGACGCCACGCGTGCCCTGGAGGAGACCCAGGTGAGCCTGGACGAGCGGC  
GGCAGCTGGACGGCTCCTCCCTGCAGGCCCTGCAGAACGCCGTGGACGCCGTGTCGCTGGCCGTGGACGCGCACA  
AAGCGGAGGGCGAGCGGGCGGGCGGCCACGTGCGGGCTCCGGAGCCAAGTGCAGGCGCTGGATGACGAGGTGG  
GCGCGCTGAAGGCGGCCGCGGCCGAGGCCCGCCACGAGGTGCGCCAGCTGCACAGCGCCTTCGCGGCCCTGCTGG  
AGGACGCGCTGCGGCACGAGGCGGTGCTGGCCGCGCTCTTCGGGGAGGAGGTGCTGGAGGAGATGTCTGAGCAGA  
CGCCGGGACCGCTGCCCCTGAGCTACGAGCAGATCCGCGTGCCCTGCAGGACGCCGTAGCGGGCTGCAGGAGC  
AGGCGCTCGGCTGGGACGAGCTGGCCGCCCCGAGTGACGGCCCTGGAGCAGGCCTCGGAGCCCCCGCGGCCGGCAG  
AGCACCTGGAGCCAGCCACGACGCGGGCCGCGAGGAGGCCGCCACCACCGCCCTGGCCGGGTGGCGCGGGAGC  
TCCAGAGCCTGAGCAACGACGTCAAGAATGTGCGGCGGTGCTGCGAGGCCGAGGCCGGGGCCGGGGCCCGCTCCC  
TCAACGCCTCCCTTGACGGCCTCCACAACGCACCTCTTCGCCACTCAGCGCAGCTTGGAGCAGCACCAGCGGCTCT  
TCCACAGCCTCTTTGGGAACCTTCAAGGGCTCATGGAAGCCAAAGTGCAGCCTGGACCTGGGGAAGCTGCAGACCA  
TGCTGAGCAGGAAAGGGAAGAAGCAGCAGAAAGACCTGGAAGCTCCCCGGAAGAGGGACAAGAAGGAAGCGGAGC  
CTTTGGTGGACATACGGGTACAGGGCCTGTGCCAGGTGCCTTGGGCGCGGCGCTCTGGGAGGCAGGATCCCCCTG  
TGGCCTTCTATGCCAGCTTTTTCAGAAGGGACGGCTGCCCTGCAGACAGTGAAGTTCAACACCACATACATCAACA  
TTGGCAGCAGCTACTTCCCTGAACATGGCTACTTCCGAGCCCCCTGAGCGTGGTGTCTACCTGTTTGACGTGAGCG  
TTGAATTTGGCCCAGGGCCAGGCACCGGGCAGCTGGTGTGGAGGTACCATCGGACTCCAGTCTGTACCACTG  
GGCAGGGGAGTGAAGCACAGCAACGGTCTTTGCCATGGCTGAGCTGCAGAAGGGTGAAGCAGTATGGTTTGAGT  
TAACCCAGGGATCAATAACAAAGAGAAGCCTGTCCGGCACTGCATTTGGGGGCTTCCTGATGTTTAAAGACCTGA  
CCCCAGCCCCAATCTGATCAGACATCATGGAATCGCCAGCTCTCCTCGGCCTGGGGCTCTGGCCAAGGATGGGC  
TGGAGGTCAATTCAGTTGGTCTGTCTCTTCCCTGGAACCTTCTGCAAAGATGGTGTGGTGTACGTGGCTTCCCTG  
TAACCACATGGGGCTTGGCCATTTCTCCATGATGAGAAGGACTGGAATGCTTCTCCGGGCAGGACATGGTCCTAG  
GAAGCCTGAACCTTGGCTTGGCATGCTTCTCAGACAGCAGGCCCTGGGCTCCAACCTTTCACCACACCCTGTAT  
TCTACAACTTCTTTGGTGTCTTCTCCTCCTGTGGTGGAACTTCTGTACAACACTTTAACTTTTCTCTTGCT  
TCCTCTTCTTCTTCTCCCTTATCGTATGATAGAAAGACATTCTTCCCCAGGAGGAATGTTTAAATGGAGGCAACA  
TTTTGGCCAACATTGGAAGCACTAGAGGGCAATGGGATTAAACCAACCTGCTTGGTCTCTATTAGTCAGTAATG  
AAGACGACAGCCTGGCCAACCAAGGGAAGGAATAGTATCTTTAGTTTCAGTCATTCTTGTAGGATATGGTT  
TAGCTGTGCCCCCACCTAAAATATCATCTTGAATTGTAATCCCTATAATCCCCACATCAAGGGAGAGATCAGGTG

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**FIGURE 2166B**

GAGGTAATTGGATCTTGGGGGCGGTTCCCCCATGCTGTTCTTGATAGTTCTCACGAGATCTGATGATTTTATA  
AGTTTGATAGTTCCTCCTGTGTTCAATTCCTTCCTGCCACCTTGTGAAGATGCCTTGGTTCCTCTTCACTGTCT  
GCCATGATTGTAAGTTTCCTGAGGCCTCCCCAGCCATGTGGAACAGTGAGTCAATTAAACCTCTTCCTTTATAA  
ATT

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**FIGURE 2167**

MILSLLFSLGGPLGWGLLGAWAQASSTSLSDLQSSRTPGVWKAEDTSKDPVGRNWCPYPMSKLVTLALCKTE  
KFLIHSQQPCPQGAPDCQKVVMYRMAHKPVYQVKQKVLTSRAWCCPGYTGPNCHEHDSMAIPEPADPGDSHQE  
PQDGPVSFKPGHLAAVINEVEVQQEQQEHLGLQNDVHRVADSLPGLWKALPGNLTAAMEANQTGHEFPDRSL  
EQVLLPHVDITFLQVHFSPiWRSFNQSLHSLTQAIRNLSLDVEANRQAISRVQDSAVARADFQELGAKFEAKVQEN  
TQRVGQLRQDVEDRLHAQHFTLHRSISELQADVDTKLRLHKAQEAPGTNGSLVLATPGAGARPEPDSLQARLGQ  
LQRNLSELHMTTARREEELQYTLEDMRATLTRHVDEIKELYSEDETDFDQISKVERQVEELQVNH TALRELRLVIL  
MEKSLIMEENKEEVERQLELNLTLQHLQGGHADLIKYVKDCNCQKLYLDLDVIREGQRDATRALEETQVSLDER  
RQLDGSSLQALQNAVDVAVSLAVDAHKAEGERARAATSRLRSQVQALDDEVGALKAAAAEARHEVRQLHSAFAALL  
EDALRHEAVLAALFGEEVLEEMSEQTPGPLPLSYEQIRVALQDAASGLQEALGWDELAARVTALEQASEPPRPA  
EHLEPSHDAGREEAATTALAGLARELQSLSDVKNVGRCCAEAGAGAASLNASLDGLHNALFATQRSLEQHQRRL  
FHSFLGNFQGLMEANVSLDLGKLQTMLSRKGKKQKQKLEAPRKRDKKEAEPLVDIRVTGPVPGALGAALWEAGSP  
VAFYASFSEGTAALQTVKFNTTYINIGSSYFPEHGYFRAPERGVYLFVAVSVEFGPGPGTGQLVFGGHHRTPVCTT  
QQSGSGSTATVFAMAELOKGERVWFELTQGSITKRSLSGTAFGGFLMFKT

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**FIGURE 2168**

CCTGTCTCTCTTCGGGTCTCGGGCCCTTGGGCGCAGCGGGGCGCGGCCATGGCGAAGGCGAAGAAGGTCGGGGC  
GCGAAGGAAGGCCCTCCGGGGCGCCGCGGGAGCGCGAGGGGGCCCGCGAAGGCCAACTCCAATCCGTTTCGAGGT  
GAAAGTTAACAGGCAGAAGTTCCAGATCCTGGGCCGGAAGACGCGCCACGACGTGGGACTGCCCGGGGTGTCTCG  
CGCACGGGCCCTCAGGAAGCGTACACAGACTTTACTAAAAGAGTACAAAGAAAGGGATAAATCCAATGTATTTCAG  
AGATAAACGCTTCGGAGAATACAACAGCAACATGAGCCCCGAGGAGAAGATGATGAAGAGGTTTGCTCTGGAACA  
GCAGCGACATCATGAGAAAAAAGCATCTACAATCTAAATGAAGATGAAGAATTGACTCATTATGGCCAGTCTTT  
GGCAGACATCGAGAAGCATAATGACATTGTGGACAGTGACAGCGATGCTGAGGATCGAGGAACGTTGTCTGCTGA  
GCTGACTGCTGCCCCACTTTGGAGGAGGCGGTGGGCTCCTTCACAAGAAGACTCAACAGGAAGGCGAGGAGCGGGA  
GAAACCGAAGTCCCGAAAGAGCTGATTGAAGAGCTCATTGCCAAGTCAAAACAAGAGAAGAGGGAGAGACAAGC  
TCAACGAGAAGATGCCCTCGAGCTCACGGAGAAGCTAGACCAAGACTGGAAAGAAATTCAGACTCTCCTGTCCCA  
CAAACTCCCAAGTCAGAGAACAGAGACAAAAGGAAAAACCCAAGCCCGATGCATATGACATGATGGTTTCGCGA  
GCTTGGCTTTGAAATGAAGGCGCAGCCCTCTAACAGGATGAAGACGGAGGCAGAATTGGCAAAGGAAGAGCAGGA  
GCACCTCAGGAAGCTGGAGGCTGAGAGACTTCGAAGAATGCTTGGAAAGGATGAGGATGAAAATGTTAAGAAACC  
AAACATATGTTCAGCAGATGATCTGAATGATGGCTTCGTGCTAGATAAAGATGACAGGCGTTTGCTTTCTTACAA  
AGATGGAAAGATGAATGTTCGAGGAAGATGTCCAGGAAGAGCAAAAGCAAGGAAGCCAGTGACCCTGAGAGCAACGA  
GGAAGAAGGTGACAGTTCAGGCGGGGAGGACACAGAGGAGAGCGACAGCCAGATAGCCACTTGACCTGGAATC  
CAACGTGGAGAGTGAGGAAGAAAACGAGAAGCCAGCAAAAGAGCAGAGGCAGACTCCTGGGAAAGGGTTGATAAG  
CGGCAAGGAAAGAGCTGGAAGGCTACCAGAGACGAGCTGCCCTACACGTTTCGAGCCCTGAATCCTATGAGGA  
ACTGAGATCTCTGTTGTAGGAAGATCGATGGAAGAGCAGCTTTTGGTGGTGGAGAGAATTCAGAAGTGCAACCA  
CCCGAGTCTCGCAGAAGGAAACAAAGCAAAATTAGAAAACTGTTTGGCTTTCTTTTGAATACGTTGGCGATTT  
GGCTACAGATGACCCACCAGACCTCACAGTCATTGATAAGTTGGTTGTGCATTATATCATCTTTGCCAGATGTT  
TCCTGAATCTGCAAGTGACGCTATCAAAATTTGTTCTCCGAGATGCGATGCATGAGATGGAAGAAATGATTGAGAC  
CAAAGGCCGGGCGGCATTGCCAGGGTTGGATGTGCTCATTATTTGAAAATCACTGGGCTGCTATTTCCAACCTC  
CGACTTCTGGCACCAGTGGTGACCCCTGCCCTCGTGTGCCTCAGTCAGCTGCTCACCAAGTGCCCCATCCTGTC  
CCTCCAGGACGTGGTGAAGGGCCTGTTCTGTGTGCTGCCTGTTCTGGAGTATGTGGCTTTGTCCAGAGGTTTAT  
ACCTGAGCTTATTAATTTCTTCTTGGGATTCTTTACATAGCAACTCCAAACAAAGCAAGCCAAGGTTCCACTCT  
GGTGCACCCCTTTCAGAGCGCTTGGGAAGAACTCGGAAGTGTCTCGTGGTGTCTGCTAGAGAGGATGTGGCCACGTG  
GCAGCAGAGCAGCCTCTCCCTCCGCTGGGCGAGTAGACTGAGGGCCCCAACTTCGACAGAGGCCAATCACATCCG  
ACTGTCTGCTGGCTGTGGGCCTGGCCCTGCTGAAGCGCTGCGTGCTCATGTACGGGTCCCTGCCATCCTTCCA  
CGCCATCATGGGGCCTCTCCAAGCCCTCCTCACGGATCACCTGGCGGACTGCAGCCACCCGAGGAGCTCCAGGA  
GCTGTGTCAGAGCACACTGACCGAAATGGAAAGCCAGAAGCAGCTCTGCCGGCCGCTGACCTGTGAGAAGAGCAA  
GCCTGTCCCCTGAAGCTTTTACACCCCGGCTGGTCAAAGTCTCTGAGTTTGGAAGAAAAACAAGGCAGTAGTAA  
GGAGGAACAGGAAGGAAGAGGCTGATCCACAAACACAAGCGTGAATTTAAAGGGGCCGTTTCAGAAATCCGCAA  
GGACAATCAGTTTCTGGCGAGGATGCAACTCTCAGAAATCATGGAACGGGATGCGGAAAGAAAGCGGAAAGTAAA  
GCAGCTTTTAAACAGCCTGGCTACACAGGAAGGCGAATGGAAGGCTCTGAAGAGGAAAAAGTTCAAAAAATAAAT  
TACATTTTATAAATAAGCTCCCCCACCCTGCTGCTGCGGTTTTGTTTCTGTATAAACGTCACCTGATGAAATAG  
AATGAATCCTGAAATGCACCTCTGGGATCGGGAATGGTCTGTGTGTTATCAGCTGCGACTGGTTCACTGCGTCTG  
GACAAGCCTCATGGGACTGGGGATTCTGGCCAGTGTAATTTCTGTCAACCACGGACGTTTGCTTCATGTGTAG  
AATTTACTGTTGTTATGCAAATTATATTTTCAATTATAA

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**FIGURE 2169**

AGAAGAAGCTGGCCAAGGATATGGGAGCAACCACCAATGACCAGAAAGTCTCTCTGGGCAGGTGTAGTGGTCTTGC  
TGCTTCTCCAGGGAGGATCTGCCTACAACTGGTTTGCTACTTTACCAACTGGTCCCAGGACCGGCAGGAACCAG  
GAAAATTCACCCCTGAGAATATTGACCCCTTCCTATGCTCTCATCTCATCTATTCAATTCGCCAGCATCGAAAACA  
ACAAGGTTATCATCAAGGACAAGAGTGAAGTGATGCTCTACCAGACCATCAACAGTCTCAAAACCAAGAATCCCA  
AACTGAAAATTCTCTTGTCATTGGAGGGTACCTGTTTGGTTCCAAAGGGTTCCACCCTATGGTGGATTCTTCTA  
CATCACGCTTGGAAATTCATTAACCTCCATAATCCTGTTTCTGAGGAACCATAACTTTGATGGACTGGATGTAAGCT  
GGATCTACCCAGATCAGAAAGAAAACACTCATTTCACTGTGCTGATTGATGAGTTAGCAGAAGCCTTTCAGAAGG  
ACTTCACAAAATCCACCAAGGAAAGGCTTCTCTGACTGCGGGCGTATCTGCAGGGAGGCAAATGATTGATAACA  
GCTATCAAGTTGAGAACTGGCAAAAGATCTGGATTTCATCAACCTCCTGTCCTTTGACTTCCATGGGTCTTGGG  
AAAAGCCCCCTTCACTGGCCACAACAGCCCTCTGAGCAAGGGGTGGCAGGACAGAGGGCCAAGCTCCTACTACA  
ATGTGGAATATGCTGTGGGGTACTGGATACATAAGGGAATGCCATCAGAGAAGGTGGTCATGGGCATCCCCACAT  
ATGGGCACTCCTTCACACTGGCCTCTGCAGAAACCACCGTGGGGGCCCCCTGCCTCTGGCCCTGGAGCTGCTGGAC  
CCATCACAGAGTCTTCAGGCTTCCTGGCCTATTATGAGATCTGCCAGTTCCTGAAAGGAGCCAAGATCACGCGCC  
TCCAGGATCAGCAGGTTCCCTACGCAGTCAAGGGGAACCAAGTGGGTGGGCTATGATGATGTGAAGAGTATGGAGA  
CCAAGGTTCAAGTCTTAAAGAATTTAAACCTGGGAGGAGCCATGATCTGGTCTATTGACATGGATGACTTCACTG  
GCAAATCCTGCAACCAGGGCCCTTACCCTCTTGTCCAAGCAGTCAAGAGAAGCCTTGGCTCCTTGTGAAGGATTA  
ACTTACAGAGAAGCAGGCAAGATGACCTTGCTGCCTGGGGCCTGCTCTCTCCCAGGAATTCTCATGTGGGATTCC  
CCTTGCCAGGCTGGCCTTTGGATCTCTTCCAAGCCTTTCCTGACTTCCTCTTAGATCATAGATTGGACCTGGT  
TTTGTTCCTGCAGCTGTTGACTTGTGCCCCTGAAGTACAATAAAAAAATTCATTTGCTCCAGTA

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**FIGURE 2170**

MDQKSLWAGVVVLLLLQGGSAYKLVCYFTNWSQDRQEPGKFTPENIDPFLCSHLIYSFASIENNKVIIKDKSEVM  
LYQTINSLKTKNPKLKILLSIGGYLFGSKGFHPMVDSSSTRLEFINSIILFLRNHNFDGLDVSWIYPDQKENTHF  
TVLIHELAEAFQKDFTKSTKERLLLTAGVSAGRQMIDNSYQVEKLAKDLDFINLLSFDFHGSWEKPLITGHNSPL  
SKGWQDRGPSSYYNVEYAVGYWIHKGMPSEKVVMGIPTYGHSFTLASAETTVGAPASGPGAAGPITESGFLAYY  
EICQFLKGAKITRLQDQQVPYAVKGNQWVGYYDDVKSMEKTVQFLKNLNLGGAMIWSIDMDDFTGKSCNQGPYPLV  
QAVKRSLGSL

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**FIGURE 2171A**

AGAGTCCTGGATGAGACGGCTCGAGAGCGTGCCCGCTGCAGATAGAGATTGGGAAGCTGAGGGCAGAGTTGGAC  
GAGGTCAACAAGAGCGCCAAGAAGAGGGAGGGCGAGCTTACGGTGGCCAGGGCCGTGTGAAGGACCTGGAGTCC  
CTGTTCCACCGAGCGAGGTGGAGCTGGCAGCTGCCCTCAGCGACAAGCGCGGCTGGAGAGTGACGTGGCTGAG  
CTGCGGGCCAGCTGGCCAAGGCCGAGGACGGTATGCAGTGGCCA<sup>AAA</sup>AGCAGCTGGAGAAGGAGACGCTGATG  
CGTGTGGACCTGGAGAACCCTGCCAGAGCCTGCAGGAGGAGCTGGACTTCCGGAAGAGTGTGTTCGAGGAGGAG  
GTGCGGGGAGACGCGCGCGCGCACGAGCGCGCCTGGTGGAGGTGGACAGCAGCCGGCAGCAGGAGTACGACTTC  
AAGATGGCACAGGCGCTGGAGGAGCTGCGGAGCCAGCACGAGCAAGTGGGCTCTACAAGCTGGAGCTGGAG  
CAGACCTACCAGGCAAGCTGGACAGCGCCAAGCTGAGCTCTGACCAGAACGACAAGGCGGCCAGTGGGCTCGC  
GAGGAGCTGAAGGAGGCCCGCATGCGCCTGGAGTCCCTCAGCTACCAGCTCTCCGGCTCCAGAAGCAGGCCAGT  
GCCGCTGAAGATCGCATTGCGGAGCTGGAGGAGGCCATGGCCGGGAGCGGGACAAGTTCGGAAGATGCTGGAC  
GCCAAGGAGCAGGAGATGACGGAGATGCGGGACGTGATGCAGCAGCAGCTGGCCGAGTACCAGGAGCTGCTGGAC  
GTGAAGCTGGCCCTGGACATGGAGATCAACGCCTACCGGAAGCTCCTGGAGGGCGAGGAGGAGAGCCTGAAGCTG  
TCCCCAGCCCATCTTCGCGCGTCACCGTCTCAGAGCCACCTCGAGCAGCAGCGGCAGCTTGTCCGCCACCGGG  
CGCCTGGGCGCAGTAAGCGGAAGCGCTGGAGGTGGAGGAGCCCTTGGCAGCGGCCCAAGCGTCTGGGCACGGG  
CACGGGTGGCAGCGGTGGCTTCCACCTGGCCAGCAGGCTCGGCCTCGGGCAGCGTCACATCGAGGAGATCGAC  
CTGGAGGGCAAGTTTGTGCAGCTCAAGAACA<sup>AA</sup>CTCGGACAAGGATCAGTCTCTGGGGA<sup>AA</sup>CTGGAGAATCAAGAGG  
CAGGTCTTGGAGGGGGAGGAGATCGCCTACAAGTTACGCCCAAGTACATCCTGCGGGCCGGCCAGATGGTCAG  
GTGTGGCAGCTGGTGGGGGGTGGCCACAGCCCCCTCGACGCTGGTGTGAAGGGCCAGAGCAGCTGGGGC  
ACGGGCGAGAGCTTCCGCACCGTCTGGTTAAGCGGATGGCGAGGAAGTGGCCATGAGGACTGTGAAGAAGTCC  
TCGGTGTGCGTGAGAATGAGAATGGGGAGGAAGAGGAGGAGGAAGCCGAGTTTGGCGAGGAGATCTTTCCAC  
CAACAGGGGGACCCGAGGACCACCTCAAGAGGCTGCTACGTGATGTGAACCCACACTCCTCATCCACACACCTTT  
CTTTACCCAGAGCCACTGAAA<sup>AA</sup>CTATTTTTATCATTGGCTTTCTTTAGTCTTGATACATTTCTAGAGAATTC  
TAAGCGAACTGCCAGAACGTGTGGGTGGGTCTCCCCAGCCCTCCCTCCTGGCGGGTCTCTCCAGCCTCACTTC  
GCTGCCACTTCGCGCTGCCCCGAGACTTTTCAATCCACCCCACTCCTCATCTACCATTTGGTCAAATTGGA  
AGCCCAGGGCCAGGACCCGGAGGTTTAGAAGATGCTTGGGCTTGGAGGGAGGAGGGCCGGCAGGCTAGCGAGGG  
GACAGGAGACGGCCCTGCTGCGGACGGAGCGGAAACTGCGTAGGAATCAGTGGTGGTGGGTTTTTTAAGGC  
TTTCTACAAAACCAATTGAGAATCCAGGCGTCGACCTGGTGGGGCCCGGGCAAGCCTGCATTCTGGCTGCCCCA  
GCTTCGGACAGCGGGA<sup>AA</sup>CTCCTCAGGCAGCCACGCAGCGGGTGTGGGCCAGCATGGGGATGGCGTGGCCCCAGGG  
GGGTTTTCACTCCGCTGCGTGGGCTTCCAGATTCCCGTTCTGGCAGCGACCGGCCGGGTTTTCTCGGACCGTTGAC  
TTTATTTGGGGAGTTTTCCCGAGTTTCA<sup>GT</sup>TCTGACTGTGCAAGGCCAACAGGGCAGGGGAGGGGAAGACCTG  
GGGAAGGAAGAATGAGGACACAGTCCCGTCGTAAGACCTGTCAACAATAAGCAGGGAGGGGAGATGTGGAGGG  
GACACATCTGGTTGCCCTTGGAGGCAGAAGCTGTGAGTTTCAAGACAGCTGTCTGCAGGGAACGCCACCATGTTGA  
CCCTCTGGAGGAGAGCGCTGTGGAGCCCTCCCGTGTTCAGCTCCGCTGCGCTGTGCCTATATATCATATGCG  
TCTATCATACTGTGCTTTATCTGTGATTTTTCTCGCTGAAACATGTTTCTCAGACAGCCAAGGCCACCTGACTC  
CTATCAGCAGCACCCAAGCCCTCAGTCCAGCTTCCCAATGCCTGGCACCCCTTCGGCAATAGCTCACCGTTT  
ACACCTCCCTCATAGATACACAGAAGTTATTTTTTAAATGGATATTTATTTTTTACATTGGTCA<sup>GT</sup>TACACAGG  
TCAGGGAGCTCACGCCAGGGCTTGGAGACAGGCTGACCCTCCTCCCCGGGGTGGCGTGGGGCTGGGGCACCCCC  
GACGGCAGAGCCTCCTTCAGAAAGTGCAGCTCAAGTCTTAAAGACACCAAACTGAGCCATGGGCACGCGCCGTC  
TCCGGGCCATGGCGTTCACTGCAGGGCGGGGGCGGCACCGCTCCCTGTGACTGCATCCCGCTCCCTGGGGACC  
TGCTGTGGCAGGAAGGAATGGGGGGCCCCAGCCAGGCCGGGAAGGAGCCAGCGGCCGACAAAGCAGAAACACC  
GCTGTCCACGTAGCCCTGCTGGCTGTCTTGTCTCAGAAGTCCCGGTCCCATGTAGATAGAGCCCGGCGGAT  
CTTACCAAGCATTTCTCTGGAGGCTACGCCGCTTGGTGTCTCCAGTGAGGCGGCTGGTAGGGAGCTTTGCCT  
GCCCCGGGGATACCTCTACAGCCGCTGGAAGTGGGAATGCTGGCGACAGACTGTGTCTGTTTCCACCTTCAT  
AGCAGGAATCACCCGACCCGACTGGCTGGGCTTCGTGCTAGCGAGGGTTTTCTGGGGGTGGGTCTTGGTGTATCT  
TGTCTATGGGGAATCTCTGCAGTGGTCTCAGCCACATCCTAGTATATTTGGCTCTGGAGGAGCAAAGCTGTATC  
CTGGAGTTGGTCTGTGATTTGCCGACAGACTTGACAGCTGGGCTCAGCAAAGTCCCCCCCCAAACCCGAGGTCC  
TCATGTCCAGACGCTGCCAGTCTGTCTGAAAACAGCACGCCCCAGGCCACAGAACCCCCACCTACATTTG  
CCTTGGGTGGAGCTGGGGGTGGTCCTAGGACTGCGGGTGCCTTAGCTGAAGGGGGCCCGCAGAAGCGTGAGCTG

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**FIGURE 2171B**

GGCCGCCTGTGGGTCATTGGAGGTTTCATTGAGAATTGAGTCCTTTGGAAAGACTAAGAAAATCAAATTTTTAAAA  
GTTATTTATGGCCTGGGAAACAATTTGCATTTGTCCCAAATACGCTTAGCTGTGTGCCGCTTAGAACGATGAGA  
AACCATCCCTCTGTGTAAGCCCGTGCCGTGTGACTCGAAGCCTAGCGCCCTCCCTGCGAAGCATCAGACGCCACC  
CAGCCCTGGGGGAGGCCACGCCTGCTGGACCAACGCGGGTTCTGGGGTGACAGCGCCAGGTTAACGCTGAAGC  
CTGCCCCGCTGAGCCCAAGAGCCGGGAGGCCTGCGGGCTGACCCAGAATCCGATCATGCACCTGTCCTCATGCCA  
GCGGCTTTGGCTGGGGTTGGTCTGAAGCCTGCACGCGGCAGTTCTTTGTTAAAGATCTGAGGGACTCGTCAGTCC  
TAGCGTCGCCGCCTGCAGCCTCTTCCAAGCCCTGCGTCCAGCGAGCGTCACAGCACAACCTGCAAAAACGGAGCT  
GGGCTGCAGCTGGGGCTGGCATGGACTTTTCATTTAGAGATTTCGGTTTTTAAGAAGATGCATGCCTAGCGTGTTT  
TTTTTTTTTCCAATGATTTGTAATATACATTTTATGACTGGAACTTTTTTGTACAACACTCCAATAAA



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**FIGURE 2172**

RVLDETARERARLQIEIGKLRAELDEVNKSAKKREGELTVAQGRVKDLES LFHRSEVELAAALSDKRGLESDVAE  
LRAQLAKAEDGHAVAKKQLEKETLMRVDLENRCQSLQEELDFRKSVFEEVRETRRRHERRLVEVDSSRQQEYDF  
KMAQALEELRSQHDEQVRLYKLELEQTYQAKLDSAKLSSDQNDKAASAAREELKEARMRLESLSYQLSGLQKQAS  
AAEDRIRELEEEAMAGERDKFRKMLDAKEQEMTEMRDVMQQQLAEYQELLDVKLALDMEINAYRKLLEGEESLKL  
SPSPSSRVTVSRATSSSSGSLSATGRLGRSKRKRWRWRSPWQRPKRPGHGHGWQRWLPPGPAGLGLGQRHIEEID  
LEGKFVQLKNNSDKDQSLGNWRIKRQVLEGEETIAYKFTPKYILRAGQMTVWAAGAGVAHSPPSTLVWKGQSSWG  
TGESFRTVLVNADGEEVAMRTVKKSSVMRENENGESEEEEEAEFGEDLFHQQGDPRTTSRGCVYM

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**FIGURE 2173**

CTTATTATGACTGAACAAGCAAGAAGATATCTGAGTACTTACACAGCTACCAGTAGTACTTCAAGAGCTCTCATA  
CTGTAAATTGTTATTAAAAATTGATGATATGCCCCACTCCCTTACTGCAGTCTCTACTAAATTAGGTTGCAGTGAAA  
TTTTTCTCAATTAGTTGTTTTTAAAGTTGTAAGATAGCCCTTTAATACAGCATCTTTTTTCTATTCTATATAGT  
AGGCAGAAAGCTAGTAAGTCACTTAAGGGGTAGATAGTTTCATAGTTTATTTTTTAAGAGATGAGATTTTTAAAA  
ATTGTTTTTAAAGAACAAGATGGGAAAATAATAGAATGTTTCATGGATTTCTAAAAGTAAATTCTCATATATTTTC  
TTCACAAGATATATGTTGCTACTCTCTTGATGCTGCAGTTTGTATAGATAGGTGTATGAGTATATATGATTTTC  
TGAAATTAGTCTATGTATGGAAAGCACACATGATTTTATGAAGTACTTTTGCCCATGTGCTGATTTACTTAGGCT  
ACCATTTACAAAGAAACACATTGAAAAGGAATTTAAAGGAAGGATAGAAAGTTGCACTACTAATTTTTTGTTTTT  
TTTTTCAGAAGCAGTAAAATTAAGTACAGTGTTAAATGTATTTATTTGAGCATAGTACTGAAAACAAAAAGCATT  
CAAAAAGAGTTTTTTCTTTATTAGTAAATAGTATTTTCTTAATCTCAGAGGAGCTGAGAGTTTGTGTAATGTA  
TTGTACAGTATGTAGGAGCAGGAGAACTTTGTAAATTGGAAAGAAGTCTGTTTTATAATTTATTTTATTTTAA  
AAGCTT

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**FIGURE 2174**

LIMTEQARRYLSTYTATSSISRALIL

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**FIGURE 2175A**

GGGAGCGCGGGGAGCGCGGGCCGGCGGGCGAGGGAGGACGGGGGCGCAGACGGCCGGCGCGCGGGCGGGCTAC  
CATGGGCGTGCGGTGAGCAGCCGCTCGGGACGACTTCCTCGGCTGCGCGGGCGCTCGCGCGGAGCTCCCCGGCCGG  
CGGTGCGTCCCCACGGTCACCATGAAAGACGACTTCGAGAGGAGGAGGAGGTGCAATCCTTCGGTTACAAGCGG  
TTTGTATTACAGGAAGGAACACAATGTACCAATGTAAAAATAACTGGGCACTGAAGTTTTCTATCATATTATTA  
TACATTTTGTGTGCCCTTGCTAACAACTCACAGTAGCCATTTTGGGATATAAAGTTGTAGAGAAAATGGACAATGTC  
ACAGGTGGCATGGAAACATCTCGCCAAACCTATGATGACAAGCTCACAGCAGTGGAAAGTGACCTGAAAAAATTA  
GGTGACCAAACTGGGAAGAAAGCTATCAGCACCAACTCAGAAGCTTCCACCTTCAGATCAGACATTCTAGATCTC  
CGTCAGCAACTTCGTGAGATTACAGAAAAAACAGCAAGAACAAGGATACGCTGGAGAAGTTACAGGCGAGCGGG  
GATGCTCTGGTGGACAGGCAGAGTCAATTGAAAGAACTTTGGAGAATAACTCTTTCTCATCACCCTGTAAAC  
AAAACCTCCAGGCGTATAATGGCTATGTACGAATCTGCAGCAAGATACCAGCGTGTCCAGGGCAATCTGCAG  
AACCAAATGTATTCTCATAATGTGGTCATCATGAACCTCAACAACCTGAACCTGACCCAGGTGCAGCAGAGGAAC  
CTCATCAGCAATCTGCAGCGGTCTGTGGATGACACAAGCCAGGCTATCCAGCGAATCAAGAACGACTTTCAAAAT  
CTGCAGCAGGTTTTTCTCAAGCCAAGAAGGACACGGATTGGCTGAAGGAGAAAGTGCAGAGCTTGCAGACACTG  
GCTGCCAACTCTGCGTTGGCCAAAGCCAACAACGACACCTGGAGGATATGAACAGCCAGCTCAACTCATT  
ACAGGTGAGTGGAGAATCAGCACTATCTCTCAAGCCAACGAGCAGAACCTGAAAGACCTGCAGGACTTACAC  
AAAGATGCAGAGAATAGAACAGCCATCAAGTTCAACCAACTGGAGGAACGCTTCCAGCTCTTTGAGACGGATATT  
GTGAACATCATTAGCAATATCAGTTACACAGCCCACCACCTGCGGACGCTGACCAGCAATCTAAATGAAGTCAGG  
ACCACTTGCAGAGATACCTTACCAACACACAGATGATCTGACCTCCTGAATAATACCCTGGCCAACTCCGT  
TTGGATTCTGTTCTCTCAGGATGCAACAAGATTTGATGAGGTGAGGTTAGACACTGAAGTAGCCAACCTATCA  
GTGATTATGGAAGAAATGAAGCTAGTAGACTCCAAGCATGGTCAGCTCATCAAGAATTTTACAATACTACAAGGT  
CCACCGGGCCCCAGGGTCCAAGAGGTGACAGAGGATCCAGGGACCCCTGGCCCAACTGGCAACAAGGGACAG  
AAAGGAGAGAAGGGGGAGCCTGGACCACCTGGCCCTGCGGGTGAGAGAGGCCCAATTGGACCAGCTGGTCCCCC  
GGAGAGCGTGGCGGCAAGGATCTAAAGGCTCCCAGGGCCCCAAAGGCTCCCGTGGTTCCCTGGGAAGCCCGG  
CCTCAGGGCCCCAGTGGGGACCCAGGCCCCCCGGGCCACCAGGCAAGAGGGACTCCCCGCCCTCAGGGCCCT  
CCTGGCTTCCAGGGACTTCAGGGCACCGTTGGGGAGCCTGGGGTGCTTGACCTCGGGGACTGCCAGGCTTGCCCT  
GGGGTACCAGGCATGCCAGGCCCCAAGGGCCCCCGGCCCTCCTGGCCATCAGGAGCGGTGGTGCCCTGGCC  
CTGCAGAATGAGCCAACCCCGGCACCGGAGGACAATAGTAAGTCCAAGCCCTCCCTCCAGCCAGGGGGACAGGGC  
AGTGCATGTGCTTGAGACTGAGCCAACCCCAAGTGTGTGCCCCACCCATGTTATTTTTGTTTTGTTTTGTTT  
TGAGACAGGGTCTCACTCTGTTGCCAGGCTGGAGTGCAGTGGCGTGATCTCGGCTCACTGCAACCCCACTCC  
CGGGTTCAAGTGATTCTCCTGCTTAGCCTCCAGGTAGCTGGGAATACAAGCGTGTGCCCCACAGCCAGCTAA  
TTTTGTATTTTAGTAGAGAGGGGTTTACAGTGTGGGCAAGGTTGTTTCAAACCTTCTGGCCTCAAGTGATCC  
ACCTACCTAGTTTCCCAAAGTGCTGGGAATACAGGTGTGAACACCACGTTTTGTCCCCGGCTGCATATTATTT  
AACAGCAAAGGCATCATAGGGTTTGGCACAGGAGCCCTGCTGCCAGAACAGGCCTCCATACCAGGCATGTGTCTC  
TCTCTAAACGCCATTGGGTTTTTAGTGCTCATTGTTTTATGTATTATGTGTGTATGTATGGGACAGGGTCTCA  
CTCTGTACCCAGGCTGGAATGACGAAGTGAAGTAGTGCAACATAGCTCATTGCAGCTTTGACCTCCTGGGCTT  
AGGTGATCTTCCCACTCAGACTCCTGCGTAGCTGGGACCACAGGGGTATGCCACCACACCTGGCTAATTTTTAT  
TTCCCTTTTTGTAGAAACAGGGTCTTGCTATGTTGCCAGGCTGGTCTTGAACCTCCTGGCCTCAAGCAACCTCC  
TGCCCTCAGTCTTGCAAAGTGCTGGGATTCCAGGTGGGAGCCACTGCACCTGGCTCTTGCACTTGTTTATTTATAG  
GAGCCAGCCCTCAGAAGACAAACACAATGCAAAACATTTCCCTCAGGGAAGCCTGCTGGCCGCCCTGAGCGCTCT  
TCCTCGTTTTATCCTCACTCTGGAGATAGATGGGCTCCCTCGGTTAGCTCCATCAACATGTGGATGGAACCC  
TCTGCTATTGATGACTACATTTAATTTCTTTTTGAGAAAGGTGTAGATGTTACGGTGCCCTCTAGTCTTTTGAT  
AATTAAACCTTTGGCAAACTCGAATGTTGGTTAGCAACCAAGCCTATTTTTCTCTCCTTTGACCCAACCGCTA  
TTCTACTTGATTTTGGTGGTGAGGCCCCGGTTATTTTTGTTGATCCGTGAGCCATTTTTGGTGCTGGGTTCTC  
ACATCCAAGTGTTCTGGGTTCCGTATGATTCAGACTGACGCTGAACATCTGTGCCTGCCCTGCTTCTTGTGT  
TGCTTCTGTCAATTTCTGTCAATGTGAAGACGGATCCAAACACAGAAGAACAAGACCCAGTCCAAGATCCATCCA  
GATTATGTGGTTTTCGGCTTGCTCTGCAGTCCACTTTGGGTGATGCTTGCTGCGAGCACGTCCTGTAACGTGAG  
CTGTGGGCTCGTGCAGGGACGCTCAGGCTGCTCCAGCGGGACCAAGTTTTGGCCTCTGAAACACAGCTGAAG  
AAAGGCAGAGTGCTTTCTGTGATCTTTAATCAATGTTTTCCACTTTTGATTCCTAGGCTGCCCCGCTCACTGG

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**FIGURE 2175B**

AAGAACTTCACAGACAAATGCTACTATTTTTTCAGTTGAGAAAGAAATTTTTGAGGATGCAAAGCTTTTCTGTGAA  
GACAAGTCTTCACATCTTGTTTTTCATAAACACTAGAGAGGAACAGCAATGGATAAAAAACAGATGGTAGGGAGA  
GAGAGCCACTGGATCGGCCTCACAGACTCAGAGCGTGAAAATGAATGGAAGTGGCTGGATGGGACATCTCCAGAC  
TACAAAAATTGGAAGCTGGACAGCCGGATAACTGGGGTCATGGCCATGGGCCAGGAGAAGACTGTGCTGGGTTG  
ATTTATGCTGGGCAGTGGAACGATTTCCAATGTGAAGACGTCAATAACTTCATTGCGAAAAAGACAGGGAGACA  
GTACTGTCTCATCTGCATTATAACGGACTGTGATGGGATCACATGAGCAAATTTTCAGCTCTCAAAGGCAAAGGACA  
CTCCTTTCTAATTGCATCACCTTCTCATCAGATTGAAAAAAAAAAGCACTGAAAACCAATTACTGAAAAAAAAAT  
TGACAGCTAGTGTTTTTTACCATCCGTCATTACCCAAAGACTTGGGAATAAAATGTTCCCCAGGGTGATATGCT  
GATTTTCATTGTGCACATGGACTGAATCACATAGATTCTCCTCCGTCAGTAACCGTGCGATTATACAAATTATGT  
CTTCCAAAGTATGGAACACTCCAATCAGAAAAAGGTTATCATTGGTCGTTGAGTTATGGGAAGAACTTAAGCATA  
TACTGTGIAAACAGTGCCATACATTTCTAAAAATCCCAAGTGTAGGAAAAATATGCAGACATACAGATATATAGGC  
CAACTATTAGTAATAATATGAAATATACTTAAAGAGCTTTTAAAACCTTTGTATTTTGTACAAAAATTTTGTCTT  
TTACAATTTTTTTCCTTTTTTTTTTTTTTGTCATTTTACCGACATAATACATGGAGCCAAAGAAAAACAATAATGGT  
ACTAATAAAAACTCCTAGGGTTTCTGTGAGATTTAATTCTACCCAGTGGCAAAGAATTTTTTCAATTGTGGCTT  
TAAAAAATAATTAATATACATGTATATATATAT

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**FIGURE 2176**

MKDDFAEEEEVPSFGFKRFGIHEGTQCPKCHNNWALKFSIILLYILCALLTITVAILGYKVVEKMDNVTGGMETS  
RQTYDDKLTAVESDLKKLGDTGKKAISTNSELSTFRSDILDLRQQLREITEKTSKNKDTLEKLQASGDALVDRQ  
SQLKETLENNNSFLITTVNKTLQAYNGYVTNLQQDTSVLQGNLQNMYSHNVMNLLNLTQVQQRNLTITNLQR  
SVDDTSQAIQRIKNDFQNLQQVFLQAKKDDWLKEKVQSLQTLAANNSALAKANNDTLEDMSQLNSFTGQMENI  
TTISQANEQNLKDLQDLHKDAENRTAIKFNQLEERFQLFETDIVNIIISNISTAHHLRTLTSLNEVRTTCTDTL  
TKHTDDLTSLNNTLANIRLDSVSLRMQQDLMSRLDTEVANLSVIMEEMKLVDKSHGQLIKNFTILQGPPGPRGP  
RGDRGSQGPPTGNKGQKGEKGEPPGPAGERGPIGPAGPPGERGGKSGKSGQPKGSRGSPGKPGPQGPSGD  
PGPPGPPGKEGLPGPQGPFGQLQGTVGEPGVPGPRGLPGLPGVPGMPGPKGPPGPPGPSGAVVPLALQNEPTP  
APEDNSKSKPSLQPGGQGSACA

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**FIGURE 2177**

AGTTGAGCGCAGTCGCCGCTCCAGTCTATCCGGCACTAGGAACAGCCCCGGGGGCGAGACGGTCCCCGCCATGTC  
TGCGGCCATGAGGGAGAGGTTTCGACCGGTTCTGCACGAGAAGAACTGCATGACTGACCTTCTGGCCAAGCTCGA  
GGCCAAAACCGGCGTGAACAGGAGCTTCATCGCTCTTGGTGTATCGGACTGGTGGCCTTGACCTGGTGTTCGG  
TTATGGAGCCTCTCTCTCTGCAACCTGATAGGATTTGGCTACCCAGCCTACATCTCAATTAAAGCTATAGAGAG  
TCCCAACAAAGAAGATGATACCCAGTGGCTGACCTACTGGGTAGTGTATGGTGTGTTTACGATTGCTGAATTCTT  
CTCTGATATCTTCTGTATGGTTCCTTCTACTACATGCTGAAGTGTGGCTTCTGTGTGGTGCATGGCCCC  
GAGCCCTTCTAATGGGGCTGAAGTGTCTACAAGCGCATCATCCGTCCTTCTTCTGAGCAGGAGTCCCAGAT  
GGACAGTGTGGTCAAGGACCTTAAAGACAAGTCCAAAGAGACTGCAGATGCCATCACTAAAGAAGCGAAGAAAGC  
TACCGTGAATTTACTGGGTGAAGAAAAGAAGAGCACCTTAAACCAGACTAAACCAGACTGGATGGAAACTTCCTGC  
CCTCTCTGTACCTTCTACTGGAGCTTGATGTATATTAGGGACTGTGGTATAATTATTTTAAATAATGTTGCCTT  
GGAAACATTTTGAATATTAAAGATTGGAATGTGTTGTAAGTTCTTTGCTTACTTTTACTGTCTATATATATAG  
GGAGCACTTTAACTTAAATGCAGTGGGCAGTGTCCACGTTTTTGGAAAATGTATTTGCTCTGGGTAGGAAAAG  
ATGTATGTTGCTATCCTGCAGGAAATATAAACTTAAATAAAATTATATACCCACAGGCTGTGTACTTTACTGG  
GCTCTCCCTGCACGXATTTTCTCTGTAGTTACATTTAGGXTAATCTTTATGGTCTACTTCTXTAATGTACAAT  
TTTATATAATTCXGXAATGTTTTAATGTATTGTGCACATGTACATATGGAAATGTTACTGTCTGACTACAXCA  
TGCATCATGCTCATGGGGAGGAGCAGGGGAAGGTTGTATGTGTCATTTATAACTTCTGTACAGTAAGACCACCT  
GCAACAAGCTGGAGGAACCATTTGTGCTGGTGTGGTCTACTAAATAATACTTTAGGAAATACGTGATTAATATGCA  
AGTGAACAAAGTGAGAAATGAAATCGAATGGAGATTGGCCTGGTTGTTTCCGTAGTATATGGCATATGAATACCA  
GGATAGCTTTATAAAGCAGTTAGTTAGTTAGTTACTCACTCTAGTGATAAATCGGGAAATTACACACACACACA  
CACACACACACACACACACACACACACACACACACAGAGTACCCTGTAACCTCTCAATTCCCTGAAAACTA  
GTAATACTGTCTTATCTGCTATAAACTTTACATATTTGTCTATTGTCAAGATGCTACAXTGGAAXCCATTTCTGG  
TTTTATCTTCAXAGXGGAGAXACATGTTGATTAGTCTTCTTTCCCAATCTTCTTTTTTAAACCAGTTTXAGGXX  
CTTCTGXAGATTTGXCCACCTCTGATTACATGTATGTTCTXGTTTGTATCATXAGCAACAACATGCTAATGXCGA  
CACCTAGCTCTXAGXGCAATTCTGGGAGAXTGAXAGGXXGTATAXAGTXXCCCATATCTGCTTGGCAATAGTTA  
AGTCAATCTATCTTCAGTTTTTCTCTGGCCTTTAAGGTCAAACACAAGAGGCTTCCCTAGTTTACAAGTCAGAGT  
CACTTGTAGTCCATTTAAATGCCCTCATCCGTATTCTTTGTGTTGATAAGCTGCACAXGACTACATAGTAAGTAC  
AGAXCAGTAAAGTTAAXXCGGATGTCTCCATTGATCTGCCAAXTCGXATAGAGAGCAATTTGTCTGGACTAGAA  
AATCTGAGTTTTACACCATACTGTAAAGAGTCCTTTTGAATTAACTAGACTAAAACAAGTGATAACTAACTA  
ACAAGATTAAATATCCAGCCAGTACAGTATTTTTTAAGGCAATAAAGATGATTAGCTCACCTTGAGXTAACAT  
CAGGTAAGATCATXACAATGTCTCATGATGTXAAXAATATTAAAGATATCAATACTAAGTGACAGTATCACXXCT  
AATATAATATGGATCAGAGCATTTATTTTGGGGAGGAAAACAGTGGTGATTACCGGCATTTTATTAACCTTAAAA  
CTTTGTAGAAAGCAAACAAAATTGTTCTTGGGAGAAAATCACTTTTAGATTAAAAAAATTTAAGTAXCTAGGA  
GTATTTAAATCCTTTCCCATAAATAAAAGTACAGTTTTCTTGGTGGCAGAATGAAAATCAGCAACXTCTAGCAT  
ATAGACTATATAATCAGATTGACAGCATATAGAATATATTATCAGACAAGATGAGGAGGTACAAAAGTTACTATT  
GCTCATAATGACTTACAGGCTAAAXTAGXTXAAAATACTATATTAAATCTGAATGCAATTTTTTTTTTGTTC  
CTTGAGACCAAAATTTAAGTTAACTGTTGCTGGCAGTCTAAGTGTAATGTTAACAGCAGGAGAAGTTAAGAATT  
GAGCAGTTCTGTTGCATGATTTCCCAAATGAAATACTGCCTTGGCTAGAGTTTGAAAACCTAATTGAGCCTGTGC  
CTGGCTAGAAAACAAGCGTTTATTTGAATGTGAATAGTGTTCAAAGGTATGTAGTTACAGAATTCCTACCAAAC  
AGCTTAAATTCCTCAAGAAAGAATTCTTCAGCAGTTATTCCCTTACCTGAAGGCTTCAATCATTTGGATCAACA  
ACTGCTACTCTCGGAAGACTCCTCTACTCACAGCTGAAGAAAATGAGCACACCCTTACACTGTTATCACCTAT  
CCTGAAGATGTGATACACTGAATGGAATAAATAGATGTAAATAAAATTGAGXTCTCATTTAAAAAAAACCATGT  
GCCCAATGGGAAAATGACCTCATGTTGTGGTTTAAACAGCAACTGCACCCACTAGCACAGCCCATTTGAGCTAXCC  
TATATATACATCTCTGTCACTGCCCCCTC

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**FIGURE 2178**

MRERFDRFLHEKNCMTDLLAKLEAKTGVNRSFIALGVIGLVALYLVFGYGASLLCNLIGFGYPAYISIKAIESPN  
KEDDTQWLTYWVYGVFSIAEFFSDIFLSWFPFYMLKCGFLLWCMAPSPSNGAELLYKRIIRPFFLKHESQMS  
VVKDLKDKSKETADAITKEAKKATVNLLGEEKKST



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**FIGURE 2179**

GGGGTACTCGGCGGGCGGCGGAGCGGGCGGCAGAGCAGGGCGGCGGCGACTCGCAGGGTACCACCATCTTAAGGAC  
AGAAAAGCTACAGGACTCTAGGAGGCCACCGTCCTGATTGGGAAGTCCAACCTACTTTGGCCAGACAGCAGCTA  
AGCTGGTTCATCCCATCAGCCTGGATTGGTGAAACTGAATCACAGGAGATATTTCCAGGTTTGCTGGGATGGGAA  
ACCTGCTCAAAGTCCTTACCAGGGAAATTGAAACTATCCACACTTTTTCTGGATTTTGAAAATGCTCAGCCTA  
CAGAAGGAGAGAGAGAAATCTGGAACCAGATCAGCGCCGTCCTTCAGGATTCTGAGAGCATCCTTGCAGACCTGC  
AGGCTTACAAAGGCGCAGGCCAGAGATCCGAGATGCAATTCAAATCCCAATGACATTCAGCTTCAAGAAAAAG  
CTTGGAATGCGGTGTGCCCTCTTGTTGTGAGGCTAAAGAGATTTTACGAGTTTTCCATTAGACTAGAAAAAGCTC  
TTCAGAGTTTATTGGAATCTCTGACTTGTCCACCCTACACACCAACCCAACACCTGGAAAGGGAACAGGCCCTGG  
CAAAGGAGTTTGCCGAAATTTTACATTTTACCCTTCGATTGATGAGCTGAAGATGAGGAACCCGGCTATTGAGA  
ATGACTTCAGCTACTACAGAAGAACAATCAGTCGCAACCGCATCAACAACATGCACCTAGACATTGAGAATGAAG  
TCAATAATGAGATGGCCAATCGAATGTCCCTCTTCTATGCAGAAGCCACGCCAATGCTGAAAACCCCTTAGCAATG  
CCACAATGCACTTTGTCTCTGAAAACAAAACCTCTGCCAATAGAGAACACCACAGACTGCCTCAGCACAATGACAA  
GTGTCTGTAAAGTCATGCTGGAAACTCCGGAGTACAGAAGTAGGTTTACGAGTGAAGAGACCCTGATGTTCTGCA  
TGAGGGTGATGGTGGGAGTCATCCTCTATGACCATGTCCACCCTGTGGGAGCTTTCTGCAAGACATCCAAGA  
TCGATATGAAAGGCTGCATAAAAGTTTTGAAGGAGCAGGCCCCAGACAGTGTGGAGGGGCTGCTAAATGCCCTCA  
GGTTCACTACAAAGCACTTGAACGATGAATCAACTTCCAAACAGATTCGAGCAATGCTTCAGTAGAGCTCTGCTC  
AAAGAAGAGGATCTATGTGCTGACCTCAGAAGATGTATATGTTTACATAATTTAATACAGATTGATGTTAATACT  
TGTGTATTTACATAACCGTTTCCTTCTTGTCACTGAAATATATGGACCTTAATTTGTATCCTGACTGACTCAACC  
CAGCAGAGCATAAATTGACTTGAGAGCCTTACCTTTGATGTCTGAAATGAAACCCCTTCTCCAAAGGCAAAATT  
CGGAGACTTTGATCTTTGCTACTGGAGTCCTTTAACAACATCTATAACGATAAAAAATTCCTAATTGTCAAAAA  
AAAAAAAAAAAAA

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**FIGURE 2180**

MGNLLKVLTREIENYPHFFLDFENAQPTEGEREIWNQISAVLQDSESIADLQAYKGAGPEIRDAIQNPNDIQLO  
EKAWNVCPLVVRLKRFYEFSIRLEKALQSLLESITCPPYTPQHLEREQALAKEFAEILHFTLRFDELKMRNPA  
IQNDFSYYRTISRNRINNMHLDIENEVNNEMANRMSLFYAEATPMLKTLNATMHFVSENKTLPIENTTDCLST  
MTSVCKVMLETPEYRSRFTSEETLMFCMRVMVGVIILYDHVHPVGAFCKTSKIDMKGCIKVLKEQAPDSVEGLLN  
ALRFTTKHLNDESTSKQIRAMLQ

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**FIGURE 2181A**

CTGGCCGCGGCGTGGGGACAGCGAGGCGCACTGGGGCCTCCAGCGCCGGGCCGGCCGCGCGCTCCAGCCCGAGG  
TCTACGGCTTTGCGCTCCGAGCCCAGAGGAAGATGCCTGCCGGCACCAGCTCGGGCTCGGGGGCTGAACGCCTG  
TCTTCCAGGCGCACGGCAGCACTGCCCTCGGCCGGTGTCCGTAGCGGCACTCGGCGTGCCCCGGGCGGACGAAGA  
GCGCAGGCTGGGTACACCTTGCCGAATCGGCCGAGTTCGCAGCTAGCGAGGGCGGGCCGGCCGGCCCGGATGGG  
CGCGGGGTTTGGGCCCGCCGCGGTGCTCCGGAGCGGCCCGGGCACCAGGGGACGCTGAGTGCCGGAGCCGCG  
GCCGCAGAGAGAACTTGGGGCGGGGGCCATGCACCGTGCAGGAGTCTAGAGCCGAGCGGAGCGCCCCGCGGGCCC  
GCCCCGCTGTCGGGCCGTTCCGGTCTCACAGTCCCCGCGCCCGGAGTTCGCAGCGCGCTCCAGACAAGATGGCG  
CGGCCGGTCCGGGGAGGGCTCGGGGCCCCGCGCGCTCGCCTTGCCCTTCTCTTCTCTGGCTGCTTTTGCTTCGG  
CTGGAGCCGGTGACCGCCGCGGCCCGGCCGCGGCGCCCTGCGCGGCCGCTGCACTTGCGCTGGGGACTCGCTG  
GACTGCGGTGGGCGCGGGCTGGCTGCGTTGCCCGGGACCTGCCCTCTGGACGCGGAGCTAAACCTGAGTTAC  
AACAACTCTCTGAGATTGACCTGCTGGTTTTGAGGACTTGCCGAACCTACAGGAAGTGTACCTCAATAATAAT  
GAGTTGACAGCGGTACCATCCCTGGGCGCTGCTTCATCACATGTCGTCTCTCTTTCTGCAGCACAACAAGATT  
CGCAGCGTGGAGGGGAGCCAGCTGAAGGCCTACCTTTCCCTAGAAGTGTAGATCTGAGTTGAACAACATCAGG  
GAAGTGGGAACACCTGCTTTCCACACGGACCGCCTATAAAGGAGCTCAACCTGGCAGGCAATCGGATTGGCACC  
CTGGAGTTGGGAGCATTGATGGTCTGTACGGTCTGTACTCTTCGCTGAGCAAAAACAGGATCACCAG  
CTTCTGTAAAGAGCATTCAAGCTACCCAGGCTGACACAACCTGGACCTCAATCGGAACAGGATTGCGCTGATAGAG  
GGCCTCACCTTCCAGGGGCTCAACAGCTTGGAGGTGCTGAAGCTTCAGCGAAACAACATCAGCAAACTGACAGAT  
GGGGCCTTCTGGGACTGTCCAAGATGCATGTCTGACCTGGAGTACAACAGCCTGGTAGAAGTGAACAGCGGC  
TCGCTCTACGGCCTCACGGCCCTGCATCAGCTCCACCTCAGCAACAATTCCATCGCTCGCATTCACCGCAAGGGC  
TGGAGCTTCTGCCAGAAGCTGCATGAGTTGGTCTGTCTTCAACAACCTGACACGGCTGGACGAGGAGAGCCTG  
GCCGAGCTGAGCAGCCTGAGTGTCTGCGTCTCAGCCACAATTCCATCAGCCACATTGCGGAGGGTGCCTTCAAG  
GGACTCAGGAGCCTGCGAGTCTTGGATCTGGACCATAACGAGATTTCCGGGCAATAGAGGACACGAGCGGCGCC  
TTCTCAGGGCTGCACAGCCTCAGCAAGCTGACTCTGTTTGGAAACAAGATCAAGTCTGTGGCTAAGAGAGCATT  
TCGGGGCTGGAAAGCCTGGAGCACCTGAACCTTGGAGGGAATGCGATCAGATCTGTCCAGTTTGATGCCTTTGTG  
AAGATGAAGAATCTTAAAGAGCTCCATATCAGCAGCGACAGCTTCCTGTGTGACTGCCAGCTGAAGTGGCTGCCC  
CCGTGGCTAATTGGCAGGATGCTGCAGGCCCTTGTGACAGCCACCTGTGCCCCACCCAGAATCACTGAAGGGTCAG  
AGCATTTTCTCTGTGCCACCAGAGAGTTTCGTGTGCGATGACTTCCTGAAGCCACAGATCATCCCCAGCCAGAA  
ACCACCATGGCTATGGTGGGCAAGGACATCCGGTTTACATGCTCAGCAGCCAGCAGCAGCAGCTCCCCATGACC  
TTTGCTTGAAGAAAGACAATGAAGTCTGACCAATGCAGACATGGAGAATTTGTCCACGTCCACGCGCAGGAC  
GGGGAAGTGATGGAGTACACCACCATCCTGCACCTCCGTGAGGTCACTTTCCGGCAGGAGGGCCGCTACCAATGT  
GTATCACCACCACTTTGGCTCCACCTATTACATAAGGCCAGGCTCACTGTGAATGTGTGGCATCATTACCC  
AAAACGCCCCACGACATAACCATCCGGACCACCACCATGGCCCGCTCGAATGTGTGCCACAGGTACCCAAAC  
CCTCAGATTGCCTGGCAGAAGGATGGAGGCACGGATTTCCCGCTGCCCCGTGAGCGACGCATGCATGTATGCCG  
GATGACGACGTGTTTTTCACTGATGTGAAAATAGATGACGCGAGGGGTTTACAGCTGTACTGCTCAGAACTCA  
GCCGGTTCTATTTAGCTAATGCCACCCTGACTGTCTAGAGACCCCATCCTTGGTGGTCCCCTTGAAGACCGT  
GTGGTATCTGTGGGAGAAACAGTGGCCCTCCAATGCAAAGCCACGGGGAACCTCCGCCCCGCATCACCTGGTTC  
AAGGGGGACCGCCGCTGAGCCTCACTGAGCGGCACCACCTGACCCCTGACAACCAGCTCCTGGTGGTTTCAAG  
GTGGTGGCAGAGGATGCGGGCCGATATACCTGTGAGATGTCCAACACCCTGGGCACGGAGCGAGCTCACAGCCAG  
CTGAGCGTCTGCCCGCAGCAGGCTGCAGGAAGGATGGGACCACGGTAGGCATCTTACCATTGCTGTGCTGAGC  
AGCATCGTCTGACGTCACTGGTCTGGGTGTGCATCATCTACCAGACCAGGAAGAAGAGTGAAGAGTACAGTGT  
ACCAACACAGATGAAACCGCTCGTGCCACCAGATGTTCCAAGCTACCTCTCTTCTCAGGGGACCCCTTCTGACCGA  
CAAGAAACCGTGGTCAAGACCGAGGGTGGGGCCCTCAGGCCAATGGGCACATTGAGAGCAATGGTGTGTGTCCA  
AGAGATGCAAGCCACTTTCCAGAGCCCGACACTCACAGCGTTGCCGTGAGGCAGCCAAAGCTCTGTGCTGGGTCT  
GCGTATCACAAGAGCCGTGGAAAGCGATTGAGAAAGCTGAAGGGACACCTGGGCCACATAAGATGGAACACGGT  
GGCCGGGTGCTATGCACTGACTGCAACACCGAAGTGGACTGTTACTCCAGGGGACAAGCCTTCCACCCCGCCT  
GTGTCCAGACAGCGCACAGCCAAGTGGCCAAATGGCCCGGAGCCGGTGGGAGTGACCAAGAGCATCTCCA  
CATCACCAGTGCAGCAGGACTGCCGCTGGGTCTGCCCGAGTGCCAAGGGTCTCTACCCAGTAACCACGAT  
AGAATGCTGACGGCTGTGAAGAAAAGCCAATGGCATCTCTAGATGGGAAAGGGGATTCTTCTGGACTTTAGCA

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**FIGURE 2181B**

AGGTTGTATCACCCGGACTCTACAGAGCTACAGCCTGCATCTTCATTAACCTTCAGGCAGTCCAGAGCGCGCGGAA  
GCCCAGTACTTGCTTGTTTCCAAATGGCCACCTCCCCAAAGCATGTGACGCCAGTCCCAGTCCACGCCACTGACA  
GGACAGCTCCCCGGGAAACAGAGGGTGCCACTGCTGTTGGCACCAAAAAGCTAGGTTTTGTCTACCTCAGTTCTT  
GTCATACCAATCTCTACGGGAAAGAGAGGTAGGAGAGGCTGCGAGGAAGCTTGGGTTCAAGCGTCACTCATCTGT  
ACATAGTTGTAACCTCCATGTGGAGTATCAGTCGCTCACAGGACTTGGATCTGAAGCACAGTAAACGCAAGAGGG  
GATTTGTGTACAAAAGGCAAAAAAGTATTTGATATCATTGTACATAAGAGTTTTTCAGAGATTTTCATATATCTT  
TTACAGAGGCTATTTTAATCTTTAGTGATGGTTAACAGAAAAAATTATACAATTTTGACAATATTATTTTTTC  
GTATCAGGTTGCTGTTTAATTTTGAGGGGGTGGGGAAATAGTTCTGGTGCCTTAACGCATGGCTGGAATTTATA  
GAGGCTACAACCACATTTGTTACAGGAGTTTTTGGTGCGGGTGGGGAAGGATGGAAGGCCTTGGATTATATTG  
CACTTCATAGACCCCTAGGCTGCTGTGCGGTGGGACTCCACATGCGCCGGAAGGAGCTTCAGGTGAGCACTGCTC  
ATGTGTGGATGCCCCTGCAACAGGCTTCCCTGTCTGTAGAGCCAGGGGTGCAAGTGCCATCCACACTTGCAGTGA  
ATGGCTTTTCTTTTAGGTTTTAAGTCCTGTCTGTCTGTAAGGCGTAGAATCTGTCCGTCTGTAAGGCGTAGAATG  
AGGTTGTTAATCCATCACAAGCAAAAGGTCAGAACAGTTAAACACTGCCTTTCTCTCTCTTATTTTATGAT  
AAAAGCAAATGTGGCCTTCTCAGTATCATTGATTGCTATTTGAGACTTTTAAATTAAGGTAAAGGCTGCTGGTG  
TTGGTACCTGTGGATTTTTCTATACTGATGTTTTCGTTTTGCCAATATAATGAGTATTACATTGGCCTTGGGGGA  
CAGAAAGGAGGAAGTTCTGACTTTTCAGGGCTACCTTATTTCTACTAAGGACCCAGAGCAGGCCTGTCCATGCCA  
TTCCTTCGCACAGATGAAACTGAGCTGGGACTGGAAAGGACAGCCCTTGACCTGGGTCTGGGTATAATTTGCAC  
TTTTGAGACTGGTAGCTAACCATCTTATGAGTGCCAATGTGTCAATTTAGTAAACTTAAATAGAAACAAGGTCCT  
TCAAATGTTCTTTTGCCAAAAGCTGAAGGGAGTTACTGAGAAAATAGTTAACAATTACTGTCAGGTGTCATCAC  
TGTTCAAAAGGTAAGCACATTTAGAATTTGTCTTGACAGTTAACTGACTAATCTTACTTCCACAAAATATGTG  
AATTTGCTGCTTCTGAGAGGCAATGTGAAAGAGGGAGTATTACTTTTATGTACAAAGTATTTATTTATAGAAAT  
TTTGGTACAGTGATATTGAAAACCATGTAAAATATTGAAGTGTCTAACAATGGCATTGAAGTGTCTTTAATAA  
AGGTTCAATTTATAAATGTCAAAAAAAAAAAAAAAAAA

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**FIGURE 2182**

MARPVRGGLGAPRRSPCLLLLWLLLLRLEPVTAAGPRAPCAAACCTCAGDSLDCGGRGLAALPGDLPSWTRSLNL  
SYNKLSEIDPAGFEDLPNLQEVYLNNNELTAVPSLGAASSHVVSFLQHNKIRSVESGSQLKAYLSLEVLDLSLNN  
ITEVRNTCFPHGPPIKELNLAGNRIGTLELGAFDGLSRSLTLRLSKNRITQLPVRAFKLPRLTQLDLNRNRIRL  
IEGLTFQGLNSLEVCLKQRNNISKLTGAFWGLSKMHVLHLEYNLSLEVNSGSLYGLTALHQLHLSNNSIARIHR  
KGWSFCQKLHELVLFSNNLTRLDEESLAEISSLSVLRLSHNSISHIAEGAFKGLRSLRVLDLDHNEISGTIEDTS  
GAFSGLDSLKLTLFGNKKISVAKRAFSGLEGLEHLNLGGNAIRSVQFADFVKMKNLKEHIISSDSFLCDCQLKW  
LPPWLIGRMLQAFVTATCAHPESLKGQSIFSVPPESFVCDLFLKPQIITQPETTMAMVGKDIRFTCSAASSSSSP  
MTFAWKKDNEVLTNADMENFVHVHAQDGEVMEYTTILHLRQVTFGHEGRYQCVITNHFGSTYSHKARLTNVNLP  
FTKTPHDITIRTTTMARLECAATGHPNPQIAWQKDGDTDFPAARERRMHVMPDDDVFFITDVKIDDAGVYSCTAQ  
NSAGSISANATLTVLETPSLVVPLEDRVSVGETVALQCKATGNPPPRITWFKGDRPLSLTERHHLTPDNQLLVV  
QNVVAEDAGRYTCEMSNTLGTERRAHSQSVLPAAGCRKDGTIVGIFTIAVSSIVLTSLVWVCIYYQTRKKSEY  
SVTNTDETVPDPVPSYLSQGTLSDRQETVVRTEGAGPQANGHIESNGVCPRDASHFPEPDTHSVACRQPKLCA  
GSAYHKEPWKAIEKAEGTPGPHKMEHGGRVVCSDCNTEVDCYSRGQAFHPQPVSRDSAQPSAPNGPEPGGSDQEH  
SPHHQCSRTAAGSCPECQGSLYPSNHDRLTAVKKKPMASLDGKGDSSWTLARLYHPDSTELQFASLTSGSPER  
AEAQYLLVSNGHLPKACDASPESTPLTGQLPGKQVRVPLLLAPKS

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**FIGURE 2183**

ACACTCGCTTCTGGAACGTCTGAGGTTATCAATAAGCTCCTAGTCCAGACGCCATGGGTCATTTACAGAGGAGG  
ACAAGGCTACTATCACAAGCCTGTGGGGCAAGGTGAATGTGGAAGATGCTGGAGGAGAAACCCTGGGAAGGCTCC  
TGGTTGTCTACCCATGGACCCAGAGGTTCTTTGACAGCTTTGGCAACCTGTCCTCTGCCTCTGCCATCATGGGCA  
ACCCCAAAGTCAAGGCACATGGCAAGAAGGTGCTGACTTCCTTGGGAGATGCCATAAAGCACCTGGATGATCTCA  
AGGGCACCTTTGCCCAGCTGAGTGAAGTGCAGTGTGACAAGCTGCATGTGGATCCTGAGAACTTCAAGCTCCTGG  
GAAATGTGCTGGTGACCGTTTTGGCAATCCATTTTCGCAAAAGAATTCACCCCTGAGGTGCAGGCTTCCTGGCAGA  
AGATGGTGACTGGAGTGGCCAGTGCCTGTCTCCAGATAACCACTGAGCTCACTGCCCATGATGCAGAGCTTTCA  
AGGATAGGCCTTTATTCTGCAAGCAATACAAATAATAAATCTATTCTGCTAAGAGATCAC

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**FIGURE 2184**

MGHFT EEDKATITSLWGKVNVEDAGGETLGRLLVVYPWTQRFFDSFGNLSSASAIMGNPKVKAHGKKVLTSLGDA  
IKHLDDLKGTFAQLSELHCDKLHVDPENFKLLGNVLVTVLAIHFGKEFTPEVQASWQKMVTGVASALSSRYH

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**FIGURE 2185A**

TTTTTTTTTTTTTTGAGAAAGGGAATTTTCATCCCAAATAAAAGGAATGAAGTCTGGCTCCGGAGGAGGGTCCCCG  
ACCTCGCTGTGGGGGCTCCTGTTTCTCTCCGCCGCGCTCTCGCTCTGGCCGACGAGTGGAGAAATCTGCGGGCCA  
GGCATCGACATCCGCAACGACTATCAGCAGCTGAAGCGCCTGGAGAACTGCACGGTGATCGAGGGCTACCTCCAC  
ATCCTGCTCATCTCCAAGGCCGAGGACTACCGCAGCTACCGCTTCCCCAAGCTCACGGTCATTACCGAGTACTTG  
CTGCTGTTCCGAGTGGCTGGCCTCGAGAGCCTCGGAGACCTCTTCCCCAACCTCACGGTCATCCGCGGCTGGAAA  
CTCTTCTACAACTACGCCCTGGTCATCTTCGAGATGACCAATCTCAAGGATATTGGGCTTTACAACCTGAGGAAC  
ATTACTCGGGGGGCCATCAGGATTGAGAAAAATGCTGACCTCTGTTACCTCTCCACTGTGGACTGGTCCCTGATC  
CTGGATGCGGTGTCCAATAACTACATTGTGGGAATAAGCCCCCAAAGGAATGTGGGGACCTGTGTCCAGGGACC  
ATGGAGGAGAAGCCGATGTGTGAGAAGACCACCATCAACAATGAGTACAACCTACCGCTGTGGACCACAAACCGC  
TGCCAGAAAATGTGCCAAGCACGTGTGGGAAGCGGGCGTGCACCGAGAACAATGAGTGTGCCACCCCGAGTGC  
CTGGGCAGCTGCAGCGCGCCTGACAACGACACGGCCTGTGTAGCTTGCCGCCACTACTACTATGCCGGTGTCTGT  
GTGCTGCTGCCCGCCCAACACCTACAGGTTTGGGGCTGGCGCTGTGTGGACCGTGACTTCTGCGCCAACATC  
CTCAGCGCCGAGAGCAGCGACTCCGAGGGGTTTGTGATCCACGACGGCGAGTGCATGCAGGAGTGCCCTCGGGC  
TTCATCCGCAACGGCAGCCAGAGCATGTACTGCATCCCTTGTGAAGGTCCTTGCCCGAAGGTCTGTGAGGAAGAA  
AAGAAAACAAAGACCATTGATTCTGTTACTTCTGCTCAGATGCTCCAAGGATGCACCATCTTCAAGGGCAATTTG  
CTCATTAACATCCGACGGGGGAATAACATTGCTTCAGAGCTGGAGAACTTCATGGGGCTCATCGAGGTGGTGACG  
GGCTACGTGAAGATCCGCCATTCTCATGCCTTGGTCTCCTTGTCTTCTAAAAACCTTCGCTCATCCTAGGA  
GAGGAGCAGCTAGAAGGGAATTACTCCTTCTACGTCTCGACAACCAGAACTGCAGCAACTGTGGGACTGGGAC  
CACCGCAACCTGACCATCAAAGCAGGGAAAATGTACTTTGCTTTCAATCCCAAATTATGTGTTCCGAAATTTAC  
CGCATGGAGGAAGTGACGGGGACTAAAGGGCGCCAAAGCAAAGGGGACATAAACACCAGGAACAACGGGGAGAGA  
GCCTCCTGTGAAAGTGACGTCTGCATTTACCTCCACCACCGTGAAGAATCGCATCATATAACCTGGCAC  
CGGTACCGGGCCCCCTGACTACAGGGATCTCATCAGCTTCACCGTTTACTACAAGGAAGCACCTTTAAGAATGTC  
ACAGAGTATGATGGGCAGGATGCCTGCGGCTCCAACAGCTGGAACATGGTGGACGTGGACCTCCCGCCCAACAAG  
GACGTGGAGCCCGGCATCTTACTACATGGGCTGAAGCCCTGGACTCAGTACGCCGTTTACGTCAAGGCTGTGACC  
CTCACCATGGTGGAGAACGACCATATCCGTGGGGCCAAGAGTGAGATCTTGTACATTTCGACCAATGCTTCAGTT  
CCTTCCATTCCCTTGGACGTTCTTTCAGCATCGAACTCCTCTTCTCAGTTAATCGTGAAGTGAACCTCCCTCT  
CTGCCCCAAGGCAACCTGAGTTACTACATTGTGCGCTGGCAGCGGCAGCCTCAGGACGGCTACCTTTACCGGCAC  
AATTACTGCTCCAAAGACAAAATCCCCATCAGGAAGTATGCCGACGGCACCATCGACATTGAGGAGGTACAGAG  
AACCCCAAGACTGAGGTGTGTGGTGGGGAGAAAGGGCCTTGCTGCGCCTGCCCCAAAACCTGAAGCCGAGAAGCAG  
GCCGAGAAGGAGGAGGCTGAATACCGCAAAGTCTTTGAGAATTTCTGCACTAATCCATCTTCTGTCGCCAGACCT  
GAAAGGAAGCGGAGAGATGTCATGCAAGTGGCCAACACCACCATGTCCAGCCGAAGCAGGAACACCACGGCCGCA  
GACACCTACAACATCACCGACCCGAAGAGCTGGAGACAGAGTACCCCTTTCTTTGAGAGCAGAGTGGATAACAAG  
GAGAGAACTGTCATTTCTAACCTTCGGCCTTTCACATTGTACCGCATCGATATCCACAGCTGCAACCACGAGGCT  
GAGAAGCTGGGCTGCAGCGCCTCCAACCTTCGTCTTTGCAAGGACTATGCCCGCAGAAGGAGCAGATGACATTCT  
GGGCCAGTGACCTGGGAGCCAAGGCCTGAAAACCTCCATCTTTTTAAAGTGGCCGGAACCTGAGAATCCCAATGGA  
TTGATTCTAATGTATGAAATAAAATACGGATCACAAGTTGAGGATCAGCGAGAATGTGTGTCCAGACAGGAATAC  
AGGAAGTATGGAGGGGCCAAGCTAAACCGGCTAAACCCGGGGAACCTACACAGCCCGGATTACAGCCACATCTCTC  
TCTGGGAATGGGTCGTGGACAGATCCTGTGTTCTTCTATGTCCAGGCCAAAACAGGATATGAAAACCTTCATCCAT  
CTGATCATCGCTCTGCCCCTCGCTGTCTGTGATCGTGGGAGGGTGGTGATTATGCTGTACGCTCTTCATAGA  
AAGAGAAAATAACAGCAGGCTGGGGAATGGAGTGTGTATGCCTCTGTGAACCCGGAGTACTTCAGCGCTGCTGAT  
GTGTACGTTCTGTGATGAGTGGGAGGTGGCTCGGGAGAAGATCACCATGAGCCGGGAACCTGGGCAGGGGTGCTTT  
GGGATGGTCTATGAAGGAGTTGCCAAGGGTGTGGTGAAAGATGAACCTGAAACCAGAGTGGCCATTAAAACAGTG  
AACGAGGCCGCAAGCATGCGTGAGAGGATTGAGTTTCTCAACGAAGCTTCTGTGATGAAGGAGTTCAATTGTCAC  
CATGTGGTGCATTGCTGGGTGTGGTGTCCCAAGGCCAGCCAACACTGGTCATCATGGAACCTGATGACACGGGGC  
GATCTCAAAAGTTATCTCCGGTCTCTGAGGCCAGAAATGGAGAATAATCCAGTCTTAGCACCTCCAAGCCTGAGC  
AAGATGATTGAGTGGCCGAGAGATTGCAGACGGCATGGCATACCTCAACGCCAATAAGTTCTGCCACAGAGAC  
CTTGCTGCCCGGAATTGCATGGTAGCCGAAGATTTCACAGTCAAAATCGGAGATTTTGGTATGACGCGAGATATC  
TATGAGACAGACTATTACCGGAAAGGAGGCAAAGGGCTGCTGCCCCGTGCGCTGGATGTCTCTGAGTCCCTCAAG



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**FIGURE 2185B**

GATGGAGTCTTCACCACCTTACTCGGACGTCTGGTCTTCGGGGTCGTCTCTGGGAGATCGCCACACTGGCCGAG  
CAGCCCTACCAGGGCTTGTCCAACGAGCAAGTCCTTCGCTTCGTATGGAGGGCGGCCTTCTGGACAAGCCAGAC  
AACTGTCCTGACATGCTGTTTGAAGTATGCGCATGTGCTGGCAGTATAACCCCAAGATGAGGCCTTCCTTCCTG  
GAGATCATCAGCAGCATCAAAGAGGAGATGGAGCCTGGCTTCCGGGAGGTCTCCTTCTACTACAGCGAGGAGAAC  
AAGCTGCCCCGAGCCGGAGGAGCTGGACCTGGAGCCAGAGAACATGGAGAGCGTCCCCCTGGACCCCTCGGCCTCC  
TCGTCTCTCCCTGCCACTGCCCGACAGACACTCAGGACACAAGGCCGAGAACGGCCCCGGCCCTGGGGTGCTGGTC  
CTCCGCGCCAGCTTCGACGAGAGACAGCCTTACGCCCACATGAACGGGGGCCGAAGAAGAGCGGGCCTTGCCG  
CTGCCCCAGTCTTCGACCTGCTGAATCCTTGGATCCTGAATCTGTGCAAACAGTAACGTGTGCGCACGCGCAGCGG  
GGTGGGGGGGAGAGAGAGTTTTAAACAATCCATTACAAGCCTCCTGTACCTCAGTGGATCTTCAGTTCTGCCCT  
TGCTGCCCCGCGGAGACAGCTTCTCTGCAGTAAAACACATTGGGATGTTCTTTTTTCAATATGCAAGCAGCTT  
TTTATTCCCTGCCCAAACCCCTTAAGTACATGGGCCTTTAAGAACCTTAATGACAACACTTAATAGCAACAGAGC  
ACTTGAGAACCAGTCTCCTCACTCTGTCCCTGTCTTCCCTGTCTCCCTTTCTCTCTCCTCTCTGCTTCATAAC  
GGAAAAATAATTGCCACAAGTCCAGCTGGGAAGCCCTTTTTATCAGTTTGAGGAAGTGGCTGTCCCTGTGGCCCC  
ATCCAACCACTGTACACACCCGCCTGACACCGTGGGTCAATTACAAAAAACAGTGGAGATGGAAATTTTTACCT  
TTATCTTTACCTTTCTAGGGACATGAAATTTACAAAGGGCCATCGTTTCATCCAAGGCTGTTACCATTTTAACGC  
TGCCTAATTTTGCCAAAATCCTGAACCTTTCTCCCTCATCGGCCGGCGCTGATTCCTCGTGTCCGGAGGCATGGG  
TGAGCATGGCAGCTGGTTGCTCCATTTGAGAGACACGCTGGCGACACACTCCGTCCATCCGACTGCCCTGTGT  
GCTGCTCAAGGCCACAGGCACACAGGTCTCATTGCTTCTGACTAGATTATTATTGGGGGAAGTGGACACAATAG  
GTCTTTCTCTCAGTGAAGGTGGGGAGAAGCTGAACCGGC

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**FIGURE 2186**

MKSGSGGGSPTSLWGLLFLSAALSLWPTSGEICGPGIDIRNDYQQLKRLNCTVIEGYLHILLISKAEDYRSYRF  
PKLTVITEYLLLFVRVAGLESIGDLFPNLTIVIRGWKLFYNYALVIFEMTNLKDIGLYNLRNITRGAIRIEKNADLC  
YLSTVDWSLILDAVSNNYIVGNKPPKECGDLCPGTMEEEKPMCEKTTINNEYNYRCWTTNRCQKMCPSTCGKRACT  
ENNECCHPECLGSCSAPDNDTACVACRHYYYAGVCVPACPPNTYRFEGWRCVDRDFCANILSAESSDSEGFVIHD  
GECMQECPSGFIRNGSQSMYCIPCEGPCPKVCEEEKKTKTIDSVTSAQMLQGCTIFKGNLLINIRRGNNIASELE  
NFMGLIEVVTGYVKIRHSHALVSLSLKLNRLILGEEQLEGNYSFYVLDNQNLQQLWDWDHRNLTIKAGKMYFAF  
NPKLCVSEIYRMEEVTGKGRQSKGDINTRNNGERASCESDVLHFTSTTTSKNRIITWHRYRPPDYRDLISFTV  
YYKEAPFKNVTEYDGDACGSNSWNMVDVLPNPKDVPEGILLHGLKPWTQYAVYVKAVTLTMVENDHIRGAKSE  
ILYIRTNASVPSIPLDVLASNSSSQLIVKWNPPSLPNGNLSYYIVRWQRQPQDGYLYRHNYSKDKIPIRKYAD  
GTIDIEEVTENPKTEVCGGEKGPCCACPKTEAEKQAEKEEAERYKVFENFLHNSIFVPRPERKRRDVMQVANTTM  
SSRSRNTTAADTYNITDPEELETEYPPFESRVDNKERTVISNLRPFTLYRIDIHSCNHEAEKLGCSASNFFVART  
MPAEGADDIPGPVTWEPRPENSIFLKWPEPENPNGLILMYEIKYGSQVEDQRECVSRQEYRKYGGAKLNRLNPGN  
YTARIQATSLSGNGSWTDPVFFYVQAKTGYENFIHLIIALPVAVLLIVGGLVIMLYVFHRKRNN SRLNGVLYAS  
VNPEYFSAADVVPDEWEVAREKITMSRELQGSFGMVYEGVAKGVVKDEPETRVAIKTVNEAASMRERIEFLNE  
ASVMKEFNCHHVRLGLGVVSQGOPTLVIMELMTRGDLKSYLRLPEMENNVLAPPSLSKMIQMAEADGMAY  
LNANKFVHRDLAARNCMVAEDFTVKIGDFGMTRDIYETDYRKGGKGLLPVRWMSPESLKDGVTFTYSDVWSFGV  
VLWEIATLAEQPYQGLSNEQVLRVMEGGLLDKPDNCPDMLFELMRMCWQYNPKMRPSFLEIISSIKEEMEPGFR  
EVSFYYSSEENKLPEPEELDLEPENMESVPLDPSASSSSSLPDRHSGHKAENGPGPGVLVLRASFDERQPYAHMN  
GGRKNERALPLPQSSTC

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**FIGURE 2187**

TAGCACTTCATAGACTGCTATCACGCATTCAATTTTTACTAGTACCTATTGAACACTAAGTTCCAGGCACTGGGCT  
AGGCACTGGGATGGTGTGGTGAGCAAAACTGACCAGTCCTGCCGTGGAGTTTGCTGGGGGAGACACATGTTACT  
CAAAGAATCACACTAAGGATAGCAATTTATCTCAAAGCTGCAAGTTCCTGCCATCTACATGTGCCCAGAGTCCCC  
AAAATTGAGTGTCAAACAGAGGCTGGGTGACCTCCTGTCCAGGATTGCTCTCATCGTATGAATCGAAGTTTTTCAT  
CTTAACGTGTTTTTTTTCTCCTGAGAATAGGCCAACCAATCAATGGCTCAGACAGATAAGCCAACATGCATCCCGC  
CGGAGCTGCCGAAGATGCTGAAGGAGTTTGCCAAAGCCGCCATTAGGGTGCAGCCGAGGACCTCATCCAGTGGG  
CAGCCGATTATTTTGAGGCCCTGTCCCGTGGAGAGACGCCCTCCGGTGAGAGAGCGGTCTGAGCGAGTCGCTTTGT  
GTAACCGGGCAGAGCTAACACCTGAGCTGTAAAGATCCTGCATTCTCAGGTTGCTGGCAGACTGATCATCCGTG  
CAGAGGAGCTGGCCAGATGTGGAAGTGGTGAATCTCCCAACAGATCTGTTAATAGTGTGATGAATGTGGGTC  
GCTTCACGGAGGAGATCGAGTGGCTGAAGTTTTTAGCCCTTGCTTGCAGCGCTCTGGGAGTTACTATTACCAAAA  
CTCTCAAGATAGTGTGTGAGGTCTTATCATGTGACCATAATGGTGGGTGCCCCGGATCCCGTTCAGCACCTTCC  
AGTTTCTCTACACGTATATTGCCAAAGTGGATGGGGAGATCTCTGCATCACATGTCAGCAGGATGCTAAACTACA  
TGGAACAGGAAGTAATTGGCCCTGATGGTATAATCACAGTGAATGACTTTACCCAAAACCCAGGGTTCAGCTGG  
AGTAAAGCACAAATTTTGGCAATTTTAAAGGAAGATACAGAGATGATTGTACTTCAGAATGACTGAAACCCATAT  
ACCACCCAAAATCCATTTTCTGTACAACCTGGTACACACTAATAAACAATTAAAAAAAAAAAA

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**FIGURE 2188**

MAQTDKPTCIPPELPKMLKEFAKAAIRVQPQDLIQWAADYFEALSRGETPPVRERSERVALCNRAELTPELLKIL  
HSQVAGRLLIRAEELAQMWKVVNLPTDLFNSVMNVGRFTEEIEWLKFLALACSGVTITKTLKIVCEVLSCDHN  
GGSPRIPFSTFQFLYTYIAKVDGEISASHVSRMLNYMEQEVIGPDGIITVNDFTQNPRVQLE

[illegible]

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**FIGURE 2190A**

AAAATACTTGCCCTTTGGAAAAAATCATTCTGGCGTCCACATTGAGACTGGTTTAGAGGAGAGTAATACTGAAG  
ACATGCCCCCGGAATCAAGGTAGCAATTGCGGAGATGAAAAGAAATGAGTCCAAAAGATGCTTAAATGTGACCA  
TTGAACAGGATTTGACTCATTGGATATGAGGCCATGGAGCAGTGTCTGGCTAGGTGGATGGATGTTGGTGCTGTT  
TAGTTAAATAGGAACTGGAAGAGAAGCAGGCTTGCAAGAATGGTAATATTTTGGACGTGTAACCTGTCTGGCAA  
GATGTTGAAGAGGTAAAGGAGGCAGCACAGCATCATGGGCCCTGGAGGCAGAAGCCGCTTTGATTTACTCAGAAC  
ACCAAATCAGTCTCCATTTCTTGACTIONACTACACCAAGAGATTGCTTCCTTCCCTGTGCTTCCCTGGCCACT  
TGCTACTCTAGCTAGGAAGATCTGCCTCCCTTAGCTGAAGTCTAAGATGTGTAGCTTATTGATGCCTCTCCTCTT  
CTTGTTCTGCTGTTGCTGAATATAATGGGGATGCCAGGGCAGACATACCATTCAACTTGAATCTTCCCTACCCAC  
TTTGTATAGTCTTACATGTCATTGATACCTTGTTTTCTGGTACGCCTAAAAGGAGTAGAAGTCAAGTGGTATTT  
AAAAGCTTTAAGAAAAGTCAAATTTTTACTTTTTCTTCCCATCTGAGGCATGGATTTATTTCTTTTTAAAGAA  
ATCCAAATTTTTAAAGAGGGATCTTATTTTTAAACGAAGATCGATAATATCTACTATGTACTAAATGTCATT  
CTTTAAAGTTGTTCCCTCATAATTTAGTAAATTACTTCTTTTTTAAAAAAGGAAAGAAAGAGTGTGTCTT  
ACAGGCTAACATCACAACAATAAGTTTCTTCTCATCTCCTATTTATAAACTAGTGTGACTGTCTCTGAGC  
ACAGTATTAAACCTGGACAGGGAGAGGGAGGGTGTAGAGAATGAGAGGGAAAGAGAGAGAATACCTACATATAA  
GGTGACCTAAAGAAAAGCCTTTCACCTTCGGAAGATCTTTCATTTTCATTTTCTTTTTTCAAACACCAACT  
TGTACCAGAGGGAAGATCTTTTTTAAAGCGTTTCACTAAAATTTGTAAGGAAATAATGAGCTAGATAAAATAT  
TACAGTGTATTATTAATGAATTTACTCATATTTAAATAATATCTAAAAAGAGTAATTTAGGAATATTGAGGCAA  
TGAGACTTGAAGGTTATAAATAGTGGCAGTGAGAAAAGGAATATTATAGATAAGCTGTTGAAAAGAAAAGATGCT  
AAGTTTTCTAGTGCTTCTCTGTTTCCAAGGGATTATAGAAATCGGAGTTGTTTGACCTGTTTCACAGGCATC  
TCTTTGTGGACTCATTGTGTCTCTTCTTAGGCTAATAGTCACCATTTATCATGGACGGTGTGATGAGTGTG  
AAGCACACTTAACCTGCTTCGTGAGAGGTACTTGGCATCACCGGTGCACAGCTGGTGTCTAGCAGGAGACTAA  
CTAGCTGACACACCGTGCTTTGTTAGCCTAATAATCTTATTTGTTAAACTTGCCATTTGTGGATTTTTCTATT  
TTACCCCATATAAACTTCTTATTGAGATCAGATGACTTCTGAATAGCATTGCTGTATTTTCCAAGGTAAAGA  
ATATCTTTTTCAGATTTTTCTTCTTCTTTAATGTCAGAAATAGAAGAAATCTTTCTACCGACCTTGTGCCAG  
GAGATGTCATGGTCATTCCATTAAATGGGACAATAATGCCTTGTGATGCTGTGCTTATTAATGGTACCTGCATTG  
TAAACGAAAGCATGTTAACAGGAGAAAGTGTCCAGTGACAAAGACTAATTTGCCAAATCCTTCAGTGGATGTGA  
AAGGAATAGGAGATCAATTATATAATCCGGAACACATAAACGACATACTTTGTTTTGTGGGACAACCTGTTATTC  
AGACTCGTTTCTACACTGGAGAACTCGTCAAAGCCATAGTTGTTAGAACAGGATTTAGTACTTCCAAAGGACAGC  
TTGTTCTGTTCCATATTGTATCCCAAACCACTGATTTTAACTCTACAGAGATGCCTACTTGTCTTACTATGTC  
TTGTGGCAGTTGCTGGCATTGGGTTTATCTACACTATTATTAATAGCATTTTAAATGAGGTACAAGTTGGGGTCA  
TAATTATCGAGTCTCTTGATATTATCACAATTACTGTGCCCCCTGCACTTCTGCTGCAATGACTGCTGGTATTG  
TGTATGCTCAGAGAAGACTGAAAAAATCGGTATTTCTGTATCAGTCTCAAAGAATAAATATTGTGGACAGC  
TCAATCTTGTGTTGCTTTGACAAGACTGGAACCTCTAACTGAAGATGGTTTAGATCTTTGGGGGATTCAACGAGTGG  
AAAATGCACGATTTCTTTCACCAGAAGAAAATGTGTGCAATGAGATGTTGGTAAAAATCCCAGTTTGTGTGCTTGA  
TGGCTACTTGTCACTTACAAAAATGAAGGAGTGCTCTCTGGTGATCCACTTGATCTGAAAATGTTTGAGG  
CTATTGGATGGATTCTGGAAGAAGCAACTGAAGAAGAAACAGCACTTCATAATCGAATTATGCCACAGTGGTTC  
GTCCTCCCAAACACTGCTTCTGAACTTACCCTGCGAGGAACCAAGAAATGGAGCTGTTTGAACCTCCAGCTA  
CTTATGAGATAGGAATTGTTGCGCAGTTCCCATTTTCTTCTGCTTTGCAACGTATGAGTGTGGTTGCCAGGGTGC  
TGGGGGATAGGAAAATGGACGCCTACATGAAAGGAGCGCCGAGGCCATTGCCGGTCTCTGTAAACCTGAAACAG  
TTCCTGTGCAATTTCAAACGTTTGGGAAGACTTCACTAAACAGGGCTTCCGTGTGATTGCTCTTGACACAGAA  
AATTGGAGTCAAACTGACATGGCATAAAGTACAGAATATTAGCAGAGATGCAATTGAGAACAACATGGATTTTA  
TGGGATTAATTATAATGCAGAACAAATTAAAGCAAGAACCCCTGCGAGTACTTGAAGATTGTCATAAAGCCAACA  
TTCGCACCGTCATGGTTCACAGGTGACAGTATGTTGACTGCTGTCTCTGTGGCCAGAGATTGTGGAATGATTCTAC  
CTCAGGATAAAGTGATTATTGCTGAAGCATTACCTCAAAGGATGGGAAAGTTGCCAAAATAAATTGGCATTATG  
CAGACTCCCTCACGAGTGCAGTCAATCAGCAATTGACCCAGAGGCTATTCCGGTTAAATTGGTCCATGATA  
GCTTAGAGGATCTTCAAATGACTCGTTATCATTTTGAATGAATGGAAAATCATTCTCAGTGATACTGGAGCATT  
TTCAAGACCTTGTTCCTAAGTTGATGTTGATGGCACCCTGTTTCCCGTATGGCACCTGATCAGAAGACACAGT  
TGATAGAAGCATTGCAAAATGTTGATTATTTTGTGGGATGTGTGGTGTGATGGCGCAAAATGATTGTGGTGCTTTGA

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**FIGURE 2190B**

AGAGGGCACACGGAGGCATTTCCCTTATCGGAGCTCGAAGCTTCAGTGGCATCTCCCTTTACCTCTAAGACTCCTA  
GTATTTCCGTGTGCCAAACCTTATCAGGGAAGGCCGTGCTGCTTTAATAACTTCCTCCTGTGAATTAGCACTAT  
TTTCTATAGTTACTTATTCTCTGGATCATTTTATAATTTCCATATTAATTTCAAGTATGCTCGTGTATTCTTCA  
GTGATTTCCACAATTGTGCATTTTATTCTTTGGTTTAAAGTACTGAAGCATATAATGAAAGTAATTGCTAAGTAGC  
AGCTTAAAAATTCAATTATCCGATTGTATTTAACATCTTTAAGAGCATGATCATAAAGAGCTATTTTTGACACCC  
CCCCCCCACTTTTTTAACATTTAGAGTTAGTAAGGGTTTTATATCTCTTCTGTCCATATTGTTTTCAAAGGAATG  
AGGTGTTTAGGTGGCTGGAAAAGCATTGTAGGAAGTTAGATTTGAATATAGACAAGGTGGGTATTACAGTTGA  
GAATGTTATTTGAAGAATGCCTGTGAAGCCAGGTGTGGGTCTACTCAGTGCCATAGATAGACTGAGTCTTCTCT  
CGTAGGTTACCATTACATAGTAATTTTGATTCTGAATTTACATTAAATTATTTGAGTTTATACAGACCTAAATT  
TTAAATCTGTACATATATTATTTTGATGTATTAAGATGAATATTGCTGATTTAAATTTTATTTATGCACATACT  
TAAAGGACAGAAATGCTCGGGAAGTAATTGTTAAATAATGATATGTAACTTTTTAACTTTTTAAATAAATAACA  
AGATTTTTAATGTGTGTCTCCCTCAGGGTTGTTTAAAGTTTTTTTTCTCCCTCAAGTATAAATAGTGGTAACTAT  
ATGTTTTGTATCTTCTAGCACCAACTGCTGTAAAGCAATGCTGCAAATAATGCTTGAATACAAGTGGCTAAGCCA  
ACAACAGAATAAATACTTTTATAGTAGTTTATAATCCTGAAATTCGAAAGCTTTCCCAATTGCACTTGCACTCTA  
AACAAAACGTGTGCAGTTTTTACTCTATTTATTTTGTTCCTCATGTTTATGAAAGTCCTGCACAGTTTCAAAGGC  
ATGGTAAATAATATATCAATGTTTATGTAGTCTGTTACAGAAACAGCTATAGATAACATTATCCAGTGAAGAGCA  
AAATTCAGCTTTAGAAAATATTCATGCATGCAATTTTGACATATCTAAAAATAGGTTTTTGTATATTTATGGTG  
GGAGGTGGTTGGGAACTTTTAACAAAATGGGGTGTTAATTTTTGTACAGTCTGTGGGCATTACACATTTTAAAT  
GTATTAATAATTTGGTAATTATGTGTACATTAAATTAATAAAAGTTACTTCTAGTTATGATTGTGAATTCCTTAA  
GACCTTGGATTTTTTTAAGTAACTTTATATCAGAAATGATACTGCATCTTTATATTTTTAAATTTGTATTGCTGC  
TCAAGAATGGTACCCTCTTGTCAAAAAGGCATACATTCAATTTGTACATTCAGCATTGTAATAATCTTATGAA  
ACCTTTTTTGATTGAAGCTATTCAAATAAAAAATTTTAAATGAATGAAATAA

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**FIGURE 2191**

MSEIEEIFSTDLPDVMVIPLNGTIMPCDAVLINGTCIVNESMLTGESVPVTKTNLPNPSVDVKIGDQLYNPE  
THKRHTLFCGTTVIQTRFYTGELVKAIVVRTGFSTSKGQLVRSILYPKPTDFKLYRDAYLFLCLVAVAGIGFIY  
TIINSILNEVQVGVIIIESLDIITITVPPALPAAMTAGIVYAQRRLKKIGIFCISPQRINICGQLNLVCFDKTGT  
LTEDGLDLWGIQRVENARFLSPEENVCMELVKSQFVACMATCHSLTKIEGVLSGDPLDLKMF EAIGWILEEATE  
EETALHNRIMPTVVRPPKQLPESTPAGNQEMELFELPATYEIGIVRQFPFSSALQRMSVVARVLGDRKMDAYMK  
GAPEAIAGLCKPETVPVDFQNVLEDFTKQGFRVIALAHRKLESKLTWHKVQNI SRDAIENNMDFMGLIIMQNKLK  
QEPPAVLEDLHKANIRTVMTGDSMLTAVSVARDCGMILPQDKVIIAEALPPKDGKVAKINWHYADSLTQCSHPS  
AIDPEAIPVKLVHDSLEDLQMTYHFAMNGKSFVILEHFQDLVPKMLHGTVFARMAPDQKTQLIEALQNVDYF  
VGMCGDGANDCGALKRAHGGISLSELEASVASPFTSKTPSISCVPNLIREGRAALITSSCELALFSIVTYSLDHF  
IISILISSMLVLFFSDFHNCAFYSLV



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**FIGURE 2192**

CCTGCCGTTGGCGGCCTGAGTCCGCAGCGCCCTGCKCCACCCGCCCCGGACGTGGGGCCCAAGCCCCCGTGAAGA  
TGGTGTCCTGGATGATCTCCAGAGCCGTGGTGCTGGTGTTTGGGAATGCTTTATCCTGCATATTATTCATACAAAG  
CTGTGAAAACAAAAAACGTGAAGGAATATGTTCCGATGGATGATGTACTGGATTGTTTTTGCTCTCTATACTGTGA  
TTGAAACAGTAGCCGATCAAACAGTTGCTTGGTTTCCCCTGTACTATGAGCTGAAGATTGCTTTTGTGCATATGGC  
TGCTTTCTCCCTATACCAAAGGAGCAAGTTAATATATAGAAAATTCCTTCATCCACTTCTTTCTCAAAGGAAA  
GGGAGATTGATGATTATATTGTACAAGCAAAGGAACGAGGCTATGAAACCATGGTAAACTTTGGACGGCAAGGTT  
TAAACCTTGCAGCKACTGCTGCTGTTACTGCAGCAGTAAAGAGCCAAGGAGCAATAACTGAACGTTAAGAAGCT  
TCAGTATGCATGATTTAACAACCTATCCAAGGTGATGAGCCTGTGGGACAAAGACCATAACCAACCTCTACCAGAAG  
CMAAAAAGAAAAGTARCCAGCCCCCAGTGAATCAGCMGGTTATGGAATTCCACTGRAAGACGGRGATGWGRAAAC  
AGATKAAGAAGCAGAGGGGCCATATTTCAGATAATGAGATGTTAAACACACAAAGGGCTTCGAAGATCGCAAAGCAT  
GAAATCTGTGAAAACCAACAAAGGCCGCAAAGAGGTGCGGTACGGGTCATAAAATACAAAGTGAAGAAACGACC  
ACAAGTGATTTTTTAGTCATCTACACGTCAAATATCCCAAGACAGATTATGCTAAATACATCGACTTCATCTTCT  
AACATGATATATTTCAGGATTTACACATTAAATGATTATTTAAATTGTGGCAGTGATGGGGTTTACTTTCATGAA  
TTTAAATTGTTTTTATTTCCCTGTAACAATTGCTTCCAAATATTGACTACTAAAGGCAGTTCTGCAAGATGTACTA  
AATATGTATATTAGAAATTATAGAAAATCATGTTGTCCGTTTTTCAAATTCATCAACAGCCTAGAGTGCCGTGAGAT  
ATAAGATGAAACACAAATCCACAGTATACTTGAAAGGAGCCTTTTTACGGTTCAGGATAAATCAGCCTTGTGAT  
GTACTGTGTTTACCTCCTTTTGTGTTGTATCTGGTAATTAAAXTAGGGCCAGATTAGCAAGTGACATXACAA

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**FIGURE 2193**

MVSWMISRAVVLVFGMLYPAYYSYKAVKTKNVKEYVRWMMYWIVFALYTVIETVADQTVAWFPLYELKIAFVIW  
LLSPYTKGASLIYRKFLHPLLSSKEREIDDIYVQAKERGYETMVNFGROGLNLAATAAVTAAVKSQGAIATERLRS  
FSMHDLTITIQGDEPVGQRPYQPLPEAKKKSXQPPVNQXVMEFHXTXMXKQXKKQRGHIQIMRC

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**FIGURE 2194**

TCTACCTCCTAGCAAGTACTTTTGTCTTGATCCTCACTGAGAAGGCCCCAGGGCAGCGGTCTTCTCCATCTCCGCT  
GTTTTGGGGTCTTAGGGTACAGCCCAGGCGGTCACTGCCCACCTGCCAGGCTGCAGGGACAGTTGGGTGTGAGAA  
TAACACTGGCTTTGGGTAGTGCCATGGCCAGGAGTGGGTTTCCCTGCGTCTCCTCGTCCCAGGGCGCCTGGGTC  
CTCCCAGCTGACGGCAGTAAATCCACAGTGAGTTGGGGCGACTGTGAAACTGGAATGCTGTTACTTTGATAATTA  
CTTTCCAGCAGGTGTTTTCTTTCACAATGGTTTTGTTTCTTTCCTTCTGATCTGAGAAGACATGAACGTTTTCTC  
TTCACCGCCGTGGGGTGATTGACTGGTCCCCATGGGCTGCTGGAAAGGCCCGGAGATGCACTGTGGCCTGGG  
GCCATCAAGATCAAAGAACCAGGAGGCCTGGGAGATGCAGCTGGATGGGGCGGCCTGCAGACCCTGCCAGGGGGT  
TTGAGGACCCTCCCAGGTTTCCCACTGCGGAACAGGAGTGACTCTGGCTGCCAAGATACCTTCATGGTGTTTCATG  
ACAAGTGGAATCATTATTTTCAACCATTTGAAGGGGGATGCAGGCAAGACACCTTCCCAGCTGCTCCTAGAGGGGA  
CAAGCCAGGCCCTCTCTGCAGTCTCGGCAGCTCCGGAAGGACACAGTCAGGGGCCGGGCAAACACTTTGGCCAC  
AGCCCCAAACAAGCGCCACCGTGGGAGAGGAGAGGCTGCTGTCACTGGTACCGGATGCAGACCCACCTGTCTG  
CAGGCCACCCCACTCCCTGCAGCTTTGAGGCTGGCGGGGTCTGCTCCTGGGAATGGGGTGGGAGCCACAGGGA  
CGACCCGGGGCGGGCTGATGTCTTCTTGGGGGCAGACCAGAGAGCTCAAGTTTCAGAGTCAGAATTAGGCACTT  
GGAGCGTTTTTGTGGCTTGCACTTCTTATTTTCTTATTTTAGAGCGCTTAAAAATCCGGAAAAATGGGGTTT  
AAAAGAACTGTCTCTTTCAGTCTACATTTTGTTTAATACGCTTGAGCAATAAACGCTGACTTGACAGCGTGAAA  
AAAAAAAAAAAAA

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**FIGURE 2195**

MHLWPGAIIKIKEPGGLGDAAGWGLQTLPGGLRTLPGFPLRNRSDSGCQDTFMVFMVMTSGIIIFNH

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**FIGURE 2196**

CCCAAGGCTGCCCCCTCGGTCACCTCTGTTCCACCCCTCCTCTGAGGAGCTTCAAGCCAACAAGGCCACACTGGTG  
TGTCTCATAAGTGACTTCTACCCGGGAGCCGTGACAGTTGCCTGGAAGGCAGATAGCAGCCCCGTCAAGGCGGGG  
GTGGAGACCACCACCCCTCCAAACAAAGCAACAACAAGTACGCGGCCAGCAGCTACCTGAGCCTGACGCCTGAG  
CAGTGGAAGTCCCACAAAAGCTACAGCTGCCAGGTCACGCATGAAGGGAGCACCGTGGAGAAGACAGTTGCCCT  
ACGGAATGTTCA**TAG**

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**FIGURE 2197**

PKAAPSVTLFPPSSEELQANKATLVCLISDFYPGAVTVAWKADSSPVKAGVETTTPSKQSNNKYAASSYLSLTPE  
QWKSHKSYSCQVTHEGSTVEKTVAPTECS

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**FIGURE 2198**

AGCACTTTTCATTGGACGAGCCAATCATTCTTCTACTGTAAC TGACCCAGGAACATTCTGTTAACCAACGAACAA  
CTCGAGAGTGCAGAGAAAAATAGTACATGATTACAGGCAAGGAATTGTTCCCTCTGGTCTTACAGAAAAATGAATTG  
TGGAGAGCAAAGTACATCTATGATTAGCTTTTCATCTGACACTGGTGAGAAGATGATTTTGATAGGAAGAATG  
TCAGCCCAGGTTCCCATGAACATGACCATCACAGGTTGTATGATGACGTTTTACAGGACTACGCCGGCTGTGCTG  
TTCTGGCAGTGGATTAAACAGTCCTTCAATGCCGTGCTCAATTACACCAACAGAAGTGGAGACGCACCCCTCATT  
GTCAATGAGTTGGGAACAGCTTACGTTTTCTGCAACAACCTGGTGCCGTAGCAACAGCTCTAGGACTCAATGCATTG  
ACCAAGCATGTCTCACCCTGATAGGACGTTTTGTTCCCTTTGCTGCCGTAGCTGCTGCTAATTGCATTAAATATT  
CCATTAATGAGGCAAAGGGAACCTCAAAGTTGGCATTCCCGTCACGGATGAGAATGGGAACCGCTTGGGGGAGTCG  
GCGAACGCTGCGAAAAAAGCCATCACGCAAGTTGTCGTGTCCAGGATTCTCATGGCAGCCCCCTGGCATGGCCATC  
CCTCCATTCAATTATGAACACTTTGGAAAAAGAAAGCCTTTTTGAAGAGGTTCCCATGGATGAGTGCACCCATTCAA  
GTTGGGTTAGTTGGCTTCTGTTTGGTGTTTGCTACACCCCTGTGTTGTGCCCTGTTTCTCAGAAAAAGTTCCATG  
TCTGTGACAAGCTTGGAGGCCGAGTTGCAAGCTAAGATCCAAGAGAGCCATCCTGAATTGCGACGCGTGTACTTC  
AATAAGGGATTGTAAAGCAGGGAGGAAACCTCTGCAGCTCATTCTGCCACTGCAAAGCTGGTGTAGCCATGCTGG  
TGAGAAAAATCCTGTTCAACCTGGGTTCTCCAGTTACGGAACCTTTTAAAGATCCACATTAGCCTTTTAGAAT  
AAAGCTGCTACTTTAACAGAGCACCTGGCGTGGGCCAAGTGCTGATACTCCCTTACACTGAATCATGTTATGAT  
TTATAGAAATACCTTTCTGTAGCTTTTATAGTCATTGTTTTTCAAAGACGATATACCAGCCCTCACCAGGTTT  
TAAAAAGCACTGGTAGGCATAGAATAGGTGCTCAGTATATGGTCAGTAAATGTTCTATTGATTATCAATCAGTG  
AAAAAAGAAATCTGTTTAAATACTGAATTTTCACTCTCACTCCCATTGCAAATCAAGGAGATCTCAGCAGTGAAC  
TGGGAAAATACAAAAGCTCTGGGCTAATCTATAAAAACTTACCCTGAAATATTAAGGGCAGTTTGCTTCTAGITT  
GGGGATTGCGCTAGCCCAATGAAGGTGATGAAGCTTTTGGATTGGAGGGTAAAAGCTCCTTCACACCCCTTCCA  
AAAGTCAGTCACAGACCCTGCAACATGCCTTCCCTGCTGGATCATTATATACATTAGATTGTGAGTGGATTGC  
CTTGGTTGACTTTTAATTTATTGTTTTTTGTTCTTATAAAGATGATAATCTTACCTTGCAATTATTGACTTTATA  
TTCAATTATTTACATCAAATAATGAAATAACTGAAATGTACAAATGTCAAATTTTGAAGTATATTCAATACCAA  
TGCTGTATGAGTGGGCTGAATCCAGTTCATTGTTTTTTTTTGGTAAGAAGTGAGACTACAGTTCCAGCTACCTA  
CATGCTTTTTCTGTATCCTTATAGATCTCTTGGCTTTTCAAGAAATACAGTGATAATGTGTGTATGAATCAG  
TCACAATGAATTTTACTTGAATATTGTATGTTGCATTCCACTTCATTGAAAATAATGAAACCATGTACCACTGT  
TTACATCATCTGTAGTGATTTTATAGATAATATATTTAATATGACAGATTATGTTTCAACTCTGTAGATGTTTAA  
CGTCATAGACAGTTGGCCCTCTGTATCCGTGAGCTCTATATCTGTGAATTCAACCAAGTTTGGATGGAAAAATTT  
TTTTTTTTTTTTTTTTTGGAGACGGAGTCTCGCTCTGTCAACCCAGGCTGGAGTGCAGTGGCGTAGTCTCGGCTCA  
CTGCAAGCTCCGCTCCTGGGTTACGCGCTTCTCCTGCCTCAGCCTCTCTGAGAAGCTGGGACTACAGGCGCCC  
GCCACCACGCCCCGCTAATTTTTTTGTATTTTTTAGTAGAGACGGGGTTTCACTGTGGTCTCGATCTCCTGACCTC  
GTGATCCGCCCCCTTGGCCTCCCAAGGTGCTGGGATTACAAGCGTGAGCCACCGCACCCGGCTGAAAAATATT  
TCTAAAAAGATAAAAAATATACATAACGATGAAAAATAATACAAATTTAAAAACCAATACAGTATAACAATATT  
TACATAGTGCTTACATTGTATTAGGTGTTATAAGCAATCTAGAGATGATTTAGCAAGTATACAGGAGGATGTGCC  
TAGGTTATATGCAAATACTGTGCCATTTTATATCAGGAACCTTGAGCATCTGCAGATATTGGTATCGGAGGGCGGT  
CCTGGAACCAAGCATCCACGGATACTGAGGGGTGACATTTTCAAGAGTGTAGATCATTGTATTAGAGATTGTAA  
ATGAAAAAAATATAGAACTATTTAGTTTTGGTAGATTTTTTTCTGACAATGTGACCAGACTGAATTTCTCAT  
AAAGAAAAAATGGCGTGCCTTGTGTCTGTGTTTCTCTTTCTCTGAAAGGATTAATAGATCTGAAGCTTTGGGCC  
ACTTAGAGCCTTAAAAA

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**FIGURE 2199**

MILIGRMSAQVPMNMTITGCMMTFYRTTPAVLFWQWINQSFNNAVVNYNRSGDAPLTVNELGTAYVSATTGAVAT  
ALGLNALTKHVSPLIGRFVPFAAVAAANCINIPLMRQRELKVGIPVTDENG NRLGESANAAKQAITQVVSRILM  
AAPGMAIPPFIMNTLEKKAFLKRFPWMSAPIQVGLVGFCLVFATPLCCALFPQKSSMSVTSLEAELQAKIQESH  
ELRRVYFNKGL



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**FIGURE 2200**

GCGAAAGAGAAAAAGGCTGGAGCTCCCCGCCCCGGGGCTGTCAGATGGCTTGGGTTTCTGCGACGCGATTGGCTC  
GCGGAGGGCAGAAATTACTCAGCAAACATGACTATTATTAGCTGCTTAGCAACAGCTCACCAAAGTAGAGAGACC  
ACCCAGGTAGGCAACCCAGTGTGTGCATCCTCGGCTTCGGGGCAGCCTCTGAGAGCGCCAACCTTCTCGCATGCA  
ATACTTCCATTAAGGAATGCTCCCCCTCCTTTCTCTCTTATTCCTTTTCTTTCAACAGTGTCTTCTTTTTGTGG  
GATGCCTTTGC GCGCACACACGCGCGCGCASGCACACACGAACATTTCCTCGCGGTAGACACGGGGGAAAT  
GTWATATTTTTTTAAGCGCTTAAACAATTTCTGAAATTCCTCAAAGAAAAGCCTTTCAGARGCACCTTGGCCTCA  
AGCTGCAACAAATACTGGGARGTCCGGCTCGCATTCCCAGGCCTGCACCAATAATGACAGCGTGCTGGATARTGC  
GCCAGTGTGTGCCAGATTTTTTTTTCTCTCTCTTTTCTTTTATAACTAAAGGGAAGACTTAGGCTCTTGCAGG  
GAACAACGCCTCGCATTAAAGATAAACAGAATGGAAAGTTAAAGAGGAAAGCAAGGACGTTGGGAAAAGCCATCTT  
TCTTAAATCCGTCTGCCCCCAGCCGCTTTCTCC

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**FIGURE 2201**

MTIISCLATAHQSRETTQVGNPVCASSASGQPLRAPTFSHAILPLRNAPPPFSLIPFLFNSVFFLWDAFARTHAR  
AXTHNICLAVDTGGNVIF

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**FIGURE 2202**

CATCCATCCAAATTTGAAGATCCTATATTAGTTCCTCTTCAAGAATTTGCATGGCATCAATATCTACAGGAGAAA  
AAAAGGGAACTCAAAAATGAAACCTGGGAATATTCTTCCTCTGTGATTTCTTTTGTTAATGGTCAGTTTCTGGGT  
GATGCATTGGATCTGCAGAAATGGGCCCACGAGGTGTGGGATATAGTTGACATTAAACCCTCTGCACTTTATGAC  
GCACTCACTGAGGATTTTTCCGCTAAGTTCTTAAGAGACACCAAGCTATACTGTGATGTGTGTCCCAAAACATGT  
AAAAATTTTCAGGTCTTGTGCACAGGAAAAGCAGGGTTTTCTCAACGTGGCATAAGACTACATTACAAAATTCC  
ATTTTTTCATCGAATAGTACAGAATGGCTGGATACAAGGAGGGGATATAGTGTATGGAAGAGGAGATAATGGAGAG  
TCGATTTATGGTCCAACATTGAAGATGAAACTTTTCAGTTCCTCATAATAAAGAGGAGTACTTGGAATGGCC  
AACAAAGGCCGTCACAGCAACGGGTCACAATTCTATATCACACTGCAAGCAACTCCTTATCTAGATAGAAAATT  
GTGGCTTTTGGGCAACTGATTGAAGGAACAGAAGTGCTTAAACAAGTAGAATTAGTTCCAACACAGAATGAAAGA  
CCAATACATATGTGTAGAATTACTGACAGTGGAGATCCTTATGCTTGATTTTCATATCAATATTTTCTGTGATAA  
TTTATTACTTTGTATCTGATCAGCTGTTTGTGGATTTAATTAAAAAGTACTTGATAAATTGTAATAA

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**FIGURE 2203**

GCCCACGCGTCCGCCCACGCGTCCGGCCCTGCAGACAAGCGTGCCGTGCGTGCTTGTGGCCAAGGGAAGGAAGAG  
CTGGTTGATCCACAGATAGCTCCTTCCTCCCCGCCCCCTTCCTTTTGTGGAGGTCCCAGGATCTGTGTTTACA  
GACATCTGGGGGAAGAAAAGGAGCAGGAAACTACCCCGCACAGAGTTAAGCAGGAAACAACAACATCATGCA  
AAAACCCTGCAAAGAAAACGAAGGAAAGCCAAAGTGCAGCGTGCCAAAGAGGGAGGAAAAACGCCCGTATGGAGA  
ATTGA

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**FIGURE 2204**

AHASAHASGPADKRAVRACGQGKEELVDPQIAPSSPPLPFCLEVPGSVFTDIWGKKRSRKLPRTELSRKQQQHHA  
KTLQRKRRKAKVQRAKEGGKTPVWRI

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**FIGURE 2205**

ACTTCAGTTGGGCTGAGGCGGAGGAGCCGCCGCTTCTGACCTCGCTCTGGCTCCGGTGCGCGCGGCTGAGCGCGT  
GCGAGGCCCCGCGCGTCGGGCAGGGGCGGCGGCGGCCACTGCGCGCCGCCCTGAGGAGCGCCCCAGCGGCGGCGC  
GACTGCGGCTGAGGAGAGAGCCGGCTCCGGGCTCCGCGTCCTCCTGCTCCCCCGGCCCCCGCCTCCTCGGGGG  
GGCGGCGGCGACTACGGACTGGTGACGGCCGGCTGCGGCTTCGGGAAGGACTTCCGTAAGGGCCTCCTCAAGAAG  
GGCGCGTGCTACGGGGACGACGCGTGCTTCGTGGCCCGGCACCGTTCCGCGGACGTGCTCGGGGTTGCAGATGGT  
GTAGGAGGCTGGAGAGACTATGGAGTTGATCCATCTCAATTCTCAGGGACTTTAATGCGGACGTGGAACGTTTA  
GTAAAAGAAGGACGGTTTCGTACCTAGTAATCCCATTTGGAATTCTCACCACAAGCTACTGTGAGTTGCTGC

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FIGURE 2206A

TTAAATAAGTAGGGATTGTTTAAAAAAAAGCTGTAATATGTTATCTGGGGTGGATCATCTGGTGTAGTTAA  
AGCTCTCAGTGATGTCTGTGCTGGGACTTCCGGGTCTCTGTTGGACTTTTCTCCCAAACCTTCACCAGGAACCTGA  
CAATGGCGAAGCCCTTCCCGAATCCATCCCATCAGCTCCTGGGACACTGCCTCATTTCATAGAGGAGCCAGATGA  
TGCTTATATTATCAAGAGCAACCCTATTGCACTCAGGTGCAAAGCGAGGCCAGCCATGCAGATATTCTTCAAATG  
CAACGGCGAGTGGGTCCATCAGAACGAGCACGTCTCTGAAGAGACTCTGGACGAGAGCTCAGGTTTGAAGGTCCG  
CGAAGTGTTTCATCAATGTTACTAGGCAACAGGTGGAGGACTTCCATGGGCCCCGAGGACTATTGGTGCCAGTGTGT  
GGCGTGGAGCCACCTGGGTACCTCCAAGAGCAGGAAGGCCTCTGTGCGCATAGCCTATTTACGGAAAAAATTGTA  
ACAAGACCCACAAGGAAGGGAAGTTCCCATTTGAAGGCATGATTGTACTGCACTGCCGCCACCAGAGGGAGTCCC  
TGCTGCCGAGGTGGAATGGCTGAAAAATGAAGAGCCATTGACTCTGAACAAGACGAGAACATTGACACCAGGGC  
TGACCATAACCTGATCATCAGGCAGGCACGGCTCTCGGACTCAGGAAATTACACCTGCATGGCAGCCAACATCGT  
GGCTAAGAGGAGAAGCCTGTGCGCCACTGTTGTGGTCTACGTGAATGGAGGCTGGTCTTCTGGACAGAGTGGTC  
AGCCTGCAATGTTCTGTGTGGTAGAGGATGGCAGAAACGTTCCCGGACCTGCACCAACCCAGCTCCTCTCAATGG  
TGGGGCCTTTTGTGAGGGAATGTCACTGCAGAAAATAACCTGCACTTCTCTTTGTCTGTGGATGGGAGCTGGGA  
AGTGTGGAGCGAATGGTCCGTCTGCAGTCCAGAGTGTGAACATTTCGGGATCCGGGAGTGCACAGCACCACCCCC  
GAGAAATGGGGGCAAATTCTGTGAAGGTCTAAGCCAGGAATCTGAAAACCTGCACAGATGGTCTTTGCATCCTAGA  
TAAAAACCTCTTCATGAAATAAAACCCCAAAGCATTGAGAATGCCAGCGACATTGCTTTGTACTCGGGCTTGGG  
TGCTGCCGTCGTGGCCGTTGCAGTCCCTGGTCACTGGTGTACCCCTTTACAGACGGAGCCAGAGTGACTATGGCGT  
GGACGTCATTGACTCTTCTGCATGACAGGTGGCTTCCAGACCTTCAACTTCAAACAGTCCGTCAAGGTAACCTC  
CCTGCTCCTGAATTCTGCCATGCAGCCAGATCTGACAGTGAGCCGGACATACAGCGGACCCATCTGTCTGCAGGA  
CCCTCTGGACAAGGAGCTCATGACAGAGTCCCTCACTCTTTAACCCCTTTGTGCGACATCAAAGTGAAAGTCCAGAG  
CTCGTTTCATGGTTTCCCTGGGAGTGTCTGAGAGAGCTGAGTACCAGGCAAGAATCATTCCAGGACTTTTCCCCA  
TGGAACAACCCACAGCTTTAGTACAATGCATCCAGAAATAAAATGCCCTACATCCAAAATCTGTCATCACTCCC  
CACAAGGACAGAACTGAGGACAACCTGGTGTCTTTGGCCATTTAGGGGGGGCGTTAGTAATGCCAAATACAGGGGT  
GAGCTTACTCATAACACACGGTGCCATCCAGAGGAGAATTCTTGGGAGATTATATGTCCATCAACCAAGGTGA  
ACCCAGCCTCCAGTCAGATGGCTCTGAGGTGCTCCTGAGTCCCTGAAGTCACCTGTGGTCCCTCCAGACATGATCGT  
CACCACCTCCCTTTGCATTGACCATCCCGCACTGTGCAGATGTCAGTTCCTGAGCATTGGAATATCCATTTAAAGAA  
GAGGACACAGCAGGGCAAATGGGAGGAAGTGATGTCAGTGGAGATGAATCTACATCCTGTTACTGCCTTTTGGGA  
CCCCTTTGCGTGTGATGTGCTCCTGGACAGCTTTGGGACCTATGCGCTCACTGGAGAGCCAATCACAGACTGTGC  
CGTGAAGCAACTGAAGGTGGCGGTTTTTGGCTGCATGTCTGTAACTCCCTGGATTACAACCTTGAGAGTTTACTG  
TGTGGACAATAACCCCTTGTGCATTTCAAGGAAGTGGTTTCAGATGAAAGGCATCAAGGTGGACAGCTCCTGGAAGA  
ACCAAATTTGCTGCATTTCAAAGGGAATACCTTTAGTCTTCAGATTTCTGTCTTGATATTTCCCCCATTCCTCTG  
GAGAATTAACCATTTCACTGCCTGCCAGGAAGTCCCGTTCTCCCGCGTGTGGTGCAGTAACCGGCAGCCCCGTGCA  
CTGTGCCTTCTCCCTGGAGCGTTATACGCCCACTACCACCCAGCTGTCTGCAAAATCTGCATTGGCAGCTCAA  
AGGCCATGAACAGATCCTCCAAGTGCAGACATCAATCCTAGAGAGTGAACGAGAAACATCACTTTCTTCGCACA  
AGAGGACAGCACTTTCCCTGCACAGACTGGCCCCAAAGCCTTCAAATTTCCCTACTCCATCAGACAGCGGATTTG  
TGCTACATTTGATACCCCCAATGCCAAAGGCAAGGACTGGCAGATGTTAGCACAGAAAAACAGCATCAACAGGAA  
TTTATCTTATTTGCTACACAAAGTAGCCCATCTGCTGTCAATTTGAACCTGTGGGAAGCTCGTCATCAGCATGA  
TGGTGATCTTGACTCCCTGGCCTGTGCCCTTGAAGAGATTGGGAGGACACACAGAACTCTCAAACATTTTCA  
ATCCCAGCTTGATGAAGCCGACTTCAACTACAGCAGGCAAAATGGACTCTAGTCCACTTCTCTCCATGAGACAGA  
GTGATGGCCAGCTTGGGGACATTTGCTTTAAATGGGAAAGAGGCCGCTTTCTGCCAGTGGCGTTGGGGGAATTC  
AGCCTTCATTTATAATCAGTGAGATTCCCTGTTGAAGAACTAAATTTTATATAGGTAAAACATGTTAATAGGG  
AAGAGTACAAGCTCTCTTACATATAAGAGGGCTCTACTATCTCCTTGGAAATCCACATTTGGGTTAACTCCTCAGA  
TTTGGAGTGGCAAGGATAAAAGTGAGGGCAGAAGTAGCTGTGGGAAAAGATGAGCTATGATAATGCTGGGAAGGC  
AGAGATTGATTAAAGTGCATGCTTTGAAATAGGTTTTTAAATGATGTGCCCAAAGGGCCAGCTGATTCTGGTACTA  
GATTGTGAGAGTTTTCTACCAACTGGCATCTGTGATGTGAGAGATCATTGTAAAAATGGCTTTTAGACGTGAAAC  
AGGGTTGCCAACCCATTTGTATGACTTCAACAACGTCAAGGAGGGCATTAGAAATTTAGAACTGTAGCACATCAC  
ACCAGCACAGCTCCCTGTCTCTTAGCCACTTAATGGAGACACAATGGAGAGGTAAGACAGACCACAACTAG  
TTCTTATAGTGTACTCCACCTTTTACTTTTTCTGAGACAAATCTACCCTTATTCTTTCTCTCTCTCTTACC

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**FIGURE 2206B**

CCITGCAGTAGGGAGGTATCAAGGAGCATAATTAACTTGTCAATACGGAAAGTTGTTTTTCTAACACAACAAA  
GTGGGACCATCTCTATTCCCATCTAAGCCACTCAAATTGCTGAGTGCTATTAGAACACAGCTTATTACATGGATA  
TGGGGACAGGAGAGATTAAAGCAGGTTCAAAAACACATGAACTGCAGATGCCATAGGCCTCAAATCAGCTGTAAT  
TCTAGGAGACACGTGTTGATCTAGTTATCTAACATTGTTGTTATAAGAAAATGAGTTTACTGCATTTTTCAATCC  
AGATTCTTGAAATTGTCTAACATGTGGGTACTGTGTATCACAAAATCTCTCAGTAAGGCTATATGTGATCCTCA  
TTTTGCTCTTTGGGAAATTAGCAGATAGTCTTTGCTCTAAATGATATCTGAGTAAATAGACTTGAGGAATCCTCT  
ACCACAGTGTCCCTGAAACCACATGCATCATTAGGAAGCCTTCACCTGTGACTATTACAGCCTCCCTGAATATG  
CTTTCTCTATAGAACCCTAACATATGGCTATTGCTCTATGATTTTTTTTTTTTACATTAGGAGGCAGTGATATT  
GTGGAAGATTGAAATCCACAGATAATTATGACCCTCATCTTATCACTTTACTCCATCTTTTTATCCTATTAAAT  
TATTTTTGACAAGATGCTCTGGTAGACTAAAGGTGAACAGATTTGCTCTTGCTCATCTTCTGGTGGATATTTAA  
CTTGCTATTACAAATCAGGACAACCAAGTCAAGGACCCAGATGAACCACAAGGCAGCTAGTCAGCTACTTAGAG  
GTTGGTTACATTGCAATAAAAAAGTAGTCAGGGAATGGGGAGGTGGGGAGTTGGGGAGTACTTGGCAGTTGGGAT  
ATGATCCATTTTTTTAAACAAGTTTTTTGTAGATCCCTTGTAATAATAATAATAATGTTGTGAATCTCCATGC  
CAAGTGAAAAAGGCCTAAAGATGAGTTGAATTTGTGATACCATGGGTAAGGCATGGAAGAACTCTGAATGTGTT  
GGCCATTTTCTCTAACTAACATGTGGTATGTATGGTCCCTATATTAGATAGAAGTCTTTGCTACATGTAATTCA  
AAAGCATCTCGCTTTTCTCAGGAACCAAGGCTTATGATGTAGGACAAAGAAATCATCTTAGAACTGTCAAGCAT  
ATTTTCACAATACCATGTCAAGATCAGGAAAACACCCTTTTGCTAGTGTGCTTAACTTATTTCTTCTAGGA  
AACATAGATAAACAGCATGAAAATGTAAATCATCTGGCATCACTGATAGAATTTCTGAAAGAGAAAGAGAAGTA  
GATGGTCAACCAGTCACTAGTTGGTTGGCATGAGGTGGTGTGCAGAGGAAAGCTGCATTCACTATTGAGTAAAA  
CTTGTAAGAAAGCACATTATAGAGCTTATGTTGGAATCCATCTTGAGGATTTTGTGTTTAACTGTCTTTAGCAT  
TTTCCCTCTTCCCTTCTAATGGGCATTATAATTGTTTCACTACTCTGTGAATCTACATAGGTCTTTTTTTTTTAG  
ATGTTTGATACATTTTAAGTATTTTTAAATAGATGAAAATCTAAATGATTTCCCTCAAATCTATCTAGATTAT  
TTTAAGATGAGACAAGATTATGTCAATCCCTGAATGTCTGGAGTTACCTCCCATGGATTTTTTTTTCTTTGGC  
CTGGGTTTTATAACAACCTGAACATCATATCATATAGGATAACAAAGGAGGAAGTTAACTTAATTCACCTCAGA  
CTTCAGCCTAAGATTCAATCAAATTCATCCTTCAGCCTGTCTGTTTCTTCTTTATGTTTCTTTTACTTATTGCT  
GCTAGGATCTACATAGGATTCTATAGAAATGTATGAAATCTGTGGTCACTGCATGTCAGGATTGCACAGTAT  
GTTACAATACAATTTCAAAGAGAACCCACATTGTGAGATTACAGACCAAGGTGTGGTGGAGGAGGTAGAATTG  
CAGATCAGATAAAAAGTGAGCTTACACTTGAACCTTAGTTATCACTGTGACCTAAATTTAGTCCATTGTAAATAT  
GTGCTGTCAACAACACAAATACCCCTCTTGAAAGAGATTTACTCATCTATCCAAGCACTTAATTTGGAATTTTA  
TTGTCCTATTGCAAAATGAAACAAAATTTAAAGTGGCCTCGAGTACTTGGTAAGTTACTTAAAAATTTTTACAAA  
ATATCCCACTCAATGCCAAATCTTTCAGTCCCTCAAAGGCATTAAAGTCCAATAGTCATGCTTTAAATATGGCTTT  
AAATTATGCCACCAAAATGGTGCACCTTCACAGATTACCCAGACTGTAGCATCATAAAGTTAATTTACAGTTTTTA  
CAACATTGCTTCTACATTCTTACTGGTTTACATTAAATCCTTTAAGCCAAAAGGAAGCTTGCTCTATGGATTTA  
AATGCAAACCTCAATTTACCAGTGCAGGAAGTCTCATAAACTCAGATGTACTCCACAAAAATTTTATTGGCCTT  
TTTGTAAGAGATGAAAAAGAATTGACACAGTTCTCTTTAAAGAGAAGAACTTTTTATTATTATTTTTATCTCCA  
ACTGCAGGTGGTGTCTTTTGCCAAGGTCTCTGTATTTTTCTTTAGTTGTCTTTGGGAGGGGATGTTAAGTCAA  
TCACTAAACAGGGTTCTCTTTGGATTAAAGTTCTGGATTATTGCAACTATTTTCTTGAGAAACATTCTCAG  
CATCAGGATTGATAAACAAATGTAGATGATTTAAATAGGATAAATTGGTTTTAGATAATATCTTCTACTGCCAAAC  
TTCTGGCAAATTTACCTGTGAATTTCAAATGTTATAAAATCTCTTGATATGCTTTTGTGTTTCTTTTAGCCAT  
TTTCTCTTCAATTTCTTAGTCCCTCTGCCCTCTGTAAATGTGTTGAGTGATATAGCTATCAGATGTATTGAAGGC  
AAAGTTCTCGCAGAGGTCTCTGTTCCAGCTCTGTAAAGGTACAGGAATCGTGAAGGAGCTGAGAAATCTTCCTC  
TCCGGCCCACTGTCTGTGGCCCATTTGTCATTGTTTCTCATGAAACATTGCAGAGTTTGAATCCTCAGTAACCT  
CATTGACTGGATTAGAGGTGATGGCCACAGCAATGGGAGAGCAAAATGTTGGCCTACAGAGAATGACACAATTT  
TATTGCTTTTGGTGTAGTTGCCATAGTGCTGATTTTGAATTCGATGCTTTAGCCAAAAGCTGAATGACCACC  
GTTTCCGTAGTTTCCACTGTTTTGTCTGCATAGAATTTCTCGAACTACAAGCAAAAATGTATTTGTCCAATGT  
CACAAAAGTGAAAAATGTTACTAATCTT



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**FIGURE 2207**

MILVLVKALSDVCAGTSGFLLDFSSQTSPTDNGEALPESIPSAPGTLPHFIEEPDDAYIIKSNPIALRCKARPA  
MQIFFKCNGEVWHQNEHVSEETLDESSGLKVREVFINVTRQQVEDFHGPEDYWCQCVAWSHLGTSKSRKASVRIA  
YLRKNFEQDPQGREVPIEGMIVLHCRPPEGVPAAEVEWLKNEEPIDSEQDENIDTRADHNLIIRQARLSDSGNYT  
CMAANIVAKRRSLSATVVVYVNGGWSSWTEWSACNVRCGRGWQKRSRTCTNPAPLNGGAFCEGMSVQKITCTSLC  
PVDGSWEVWSEWSVCSPECEHLRIRECTAPPPRNGGKFCEGLSQESENCTDGLCILDKKPLHEIKPQSIENASDI  
ALYSGLGAAVVAVAVLVIGVTLYRRSQSDYGVDVIDSSALTGGFQTFNFKTVRQGNSLLLNSAMQPDLTVSRTYS  
GPICLQDPLDKELMTESSLFNPLSDIKVKVQSSFMVSLGVSEAEYHGKNHSRTFPHGNNHSFSTMHPRNKMPYI  
QNLSSLPTRTELRTTGFGHLGGRLVMPNTGVSLIPHGAIPENSWEIYMSINQGEPSLQSDGSEVLLSPEVTC  
GPPDMIVTTPFALTIPHCADVSEHWNHLKKRTQQGWEEVMSVEDESTSCYCLDPPFACHVLLDSFGTYALTG  
EPITDCAVKQLKVAVFGCMSCNSLDYNLRVYCVDNTPCAFQEVVSDERHQGGQLLEEKLLHFKGNTFSLQISVL  
DIPFLWRIKPFTACQEVFSSRVWCSNRQPLHCAFSLERYTPTTQLSCKICIRQLKGHEQILQVQTSILESERE  
TITFFAQEDSTFPAQTGPKAFKIPYSIRQRICATFDTPNAKGKDWQMLAQKNSINRNLSYFATQSSPSAVILNLW  
EARHQHDGDLDSLACALEEIGRTHTKLSNISESQLDEADFNYSRQNGL

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**FIGURE 2208**

GAAACAATGATTGCCAGGAAGGTCACCTTTTCAGCACCCACAGCCTCGGCAACCAGCACATATACCAGCGAAGCTCC  
TCCATGTTGTCCTTCAGCAACACTGACAAGAAGGCCAAGGTGGGTCTGGAGGCCTGTGGGAGAGCCCAGTCAGCC  
ACCCCGCCAAACCCACAGACGGCCTCTACACCTACTGGAGTGCTGGAGAAGACAGCCAGTCTGTACAGAACAGC  
AGCAGCTTCCACAACCTGGTACTCATTCAACGATGGCTCTGTGAAGACCCAGGCCCAATTGTTATCTACCAGACT  
CTGGTGTACCCAAGAGCTGCCAAGGTTTACTGGACATGTCCAGCAGAAGACGTGGACTCTTTTGAGATGGAATTC  
TATGAAGTCATTACTTCTCCTCCTAACAACGTACAAATGGAGCTCTGTGGACAAATTCGGGACATAATGCAGCAA  
AATCTGGAGCTGCACAACCTGACCCCAACACAGAATACGTGTTTAAAGTTAGAGCCATCAATGATAATGGTCCT  
GGGCAATGGAGTGATATCTGCAAGGTGGTAACACCAGATGGACATGGGAAGAACCGAGCTAAGTGGGGCCTGCTG  
AAGAATATCCAGTCTGCCCTCCAGAAGCACTTCTGAGCCCCCTTCAGAGCAGGAAACAACCTCAGACTCATCACA  
AGTAGACATATACACACATATATGTATGTATATTTTTCTCACCACATTCTTCAAGGAGGTTGTAGACAAATGT  
TTCCATGACCTCTCAGCTTTCCAACAGGAATCTTGTAAGAGCTAATAAAAGGAAATACCTGAAAAAAAAAAAAA  
AAAAAA

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**FIGURE 2209**

ETMIARKVTFSTHSLGNQHIYQRSSSMLSFSNTDKKAKVGLEACGRAQSATPAKPTDGLYTYWSAGEDSQSVQNS  
SSFHNWYSFNDGSVKTPGPPIVIYQTLVYPRAAKVYWTCPAEDVDSFEMEFYEVITSPPNNVQMELCGQIRDIMQQ  
NLELHNLTPNTEYVFKVRAINNGPGQWSDICKVVTPDGHGKNRAKWGLLKNIQSALQKHF

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**FIGURE 2210**

ATGGACGTCAGGCTCATCTGCACCACCGTACCCAAGATGGCCTTCAACTACTTGTCTGGCAGCAAGTCCATTCT  
ATGGCTGGCTGTGCCACACAAATTTTCTTCTGTGTATCACTGCTTGGCTCTGAATGCTTTCTGTTGGCTGTTATG  
TCTTATGACTGCTACATTGCCATTTGCCACCCTCTAAGATACACCAATCTCATGAGACCCAAAATTTGTAGACTT  
ATGACTGCCTTCTCCTGGATCCTGGGCTCTACAGATGGAATCATTTATGCTGTAGCCACATTTTCTTCTCCTAC  
TGTTGGGTCTCGGGAAATAGCCCACTTCTTCTGTGAGTTACCTTCCCTACTAATCCTCTCATGCAATGACACGTCA  
ATATTTGAAAAGGTTATTTTCATTTGCTCTATAGTAATGCTTGTTTTCCCTGTTGCAATCATCATTGCTTCCTAT  
GCTGGAGTTATTCTGGCTGTCATTACATGGGATCTGGAGAGGGTCGTCGCAAAGCTTTCACGACCTGTTCTCT  
CACCTCATGGTGGTGGGAATGTTCTATGGAGCAGGTTTGTTCATGTACATACAGCCACATCTGATCGCTCCCCA  
ACGCAGGACAAGCTGGTGTCTGTATTCTACACCATCCTCACTCCC

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**FIGURE 2211**

TGTCGACACAGACAGCACCATGTCGCTCATGGTCGTCAGCATGGCGTGTGTTGGGTTCTTCTTGCTGCAGGGGGC  
CTGGCCACATGAGGGAGTCCACAGAAAACCTTCCCTCCTGGCCACCCAGGTCCCCTGGTGAAATCAGAAGAGAC  
AGTCATCCTGCAATGTTGGTCAGATGTCAGGTTTGAGCACTTCCTTCTGCACAGAGAGGGGAAGTATAAGGACAC  
TTTGACCTCATTGGAGAGCACCATGATGGGGTCTCCAAGGCCAACTTCTCCATCGGTCCCATGATGCAAGACCT  
TGCAGGGACCTACAGATGCTACGGTTCTGTTACTCACTCCCCCTATCAGTTGTCAGCTCCCAGTGACCCTCTGGA  
CATCGTCATCACAGGTCTATATGAGAAAACCTTCTCTCTCAGCCCAGCCGGGCCCCACGGTTTTGGCAGGAGAGAG  
CGTGACCTTGTCTGTCAGCTCCCGGAGCTCCTATGACATGTACCATCTATCCAGGGAGGGGGAGGCCCATGAACG  
TAGGTTCTCTGCAGGGCCCCAAGGTCAACGGAACATTCCAGGCCGACTTTCCTCTGGGCCCTGCCACCCACGGAGG  
AACCTACAGATGCTTCGGCTCTTTCCGTGACTCTCCCTATGAGTGGTCAAACCTCGAGTGACCCACTGCTTGTTTC  
TGTCACAGGAAACCCCTTCAAATAGTTGGCCTTCACCCACTGAACCAAGCTCCAAAACCGGTAACCCAGACACCT  
GCATGTTCTGATTGGGACCTCAGTGGTCAAAATCCCTTTACCATCCTCCTCTTCTTCTCCTTCATCGCTGGTG  
CTCCAACAAAAAATGCTGCTGTAATGGACCAAGAGCCTGCAGGGAACAGAACAGTGAACAGCGAGGATTCTGA  
TGAACAAGACCATCAGGAGGTGTCATACGCATTAATTGGATCACTGTGTTTTACACAGAGAGAAATCACTCGCCC  
TTCTGAGAGGCCCCAAGACACCCCCAACAGATACCAGCATGTACATAGAACTTCCAAATGCTGAGCCCAGATCCAA  
AGTTGTCTTCTGTCCACGAGCACCACAGTCAGGCCTTGAGGGGATCTTCTAGGGAGACAACAGCCCTGTCTCAA  
ACCGGGTTGCCAGCTCCCATGTACCAGCAGCTGGAATCTGAAGGCATCAGTCTTCATCTTAGGGCATCGCTCTTC  
CTCACACCACGAATCTGAACATGCCTCTCTCTTGCTTACAAATGTCTAAGGTCCCCACTGCCTGCTGGAGAGAAA  
ACACACTCCTTTGCTTAGCCACAAATTCTCCATTTCACTTGACCCCTGCCACCTCTCCAACCTAACTAGCTTAC  
TTCTAGTCTACCTGAGGCTGCAATCACACTGAGGAATCACAATTCCAAACATACAAGAGGCTCCCTCTTAACA  
CAGCACTTAGACACGTGCTGTTCCACCTCCCTTCAGACTATCTTTAGCCTTCTGCCAGCAGTAAACTTATAAA  
TTTTTTAAATAATTTCAATGTAGTTTTCCCGCCTTCAAATAAACATGTCTGCCCTCA

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**FIGURE 2212**

MSLMVVSMACVGFFLLQGAWPHEGVHRKPSLLAHPGPLVKSEETVILQCWSDVRFEHFLHREGKYKDTLHLIGE  
HHDGVSKANFSIGPMMQDLAGTYRCYGSVTHSPYQLSAPSDPLDIVITGLYEKPSLSAQPGPTVLAGESVTLSCS  
SRSSYDMYHLSREGEAHERRF SAGPKVNGTFQADFPLGPATHGGTYRCFGSFRDSPYEWSNSSDPLLVSVTGNPS  
NSWPSPTESPSSKTGNPRHLHVLIGTSVVKIPFTILLFLLHRWCSNKKNAAVMDQEPAGNRTVNSEDSDEQDHQE  
VSYA

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**FIGURE 2213A**

CCGGCTTTTTCGCTGGGAGCCCAGAGCAGGAGGCAGAGCCCGCGGGAAGCTCGGAGCACTCAGGACGCCGCGCGC  
CCTTCCCCGCCCTCCCTGACCAGGGAGCAGCTCGCTCCAGGCGCCAGCCGAGGCCCCAGCCAGTGGGAGCAA  
GTCATAGAGAACAATTTCGAGAGACAGAGAGACGGAGCGCGCTTTCTGCTCAGTCCTGAAAAGTGAGCCGCTCCC  
GGGTTTGCAACCTCAAGCTTCGCAGCAGCGCGCGCGGCTGCCGGAAGGAGGCAGGTGCAGGTGCAGGAGGG  
AGGCGGCTCTGGGCTCCGCGCCTGGGTCTTGGCCATGGCTCGGTCTGGGGAGCGGCAGAGGGTCTGGAGGGCT  
GAGCAGTCAACTCAAATGCAAGTCCAAGAGGAGGAGGAGGCGGAGGTCCAAGCGGAAAGATAAAGTAAGCATATT  
GTCAACCTTCTCGCTCCTTTCAAGCACCTGAGTCTGGCATCACAAACACGGAGGATGACGACACCCCTCAGTAC  
CAGCAGCGCGGAGGTGAAGGAGAACC GCAACGTGGGCAACCTGGCCGCGCGGCCACCGCCCTCCGGGGACCGGGC  
CCGGGGCGGCGCGCCCGCGCGAAGAGGAAGCGGCCGCTGGAGGAGGGGAATGGGGGCCACTTGTGCAAACTGCA  
GCTGCTCTGGAAGAAGCTGTCTGTGGTGGTGGCGCCCAAGAACGCGCTGGTGCAGTGCACGAGCTGAGGCCGGG  
CCTGCAGTACCGGACAGTGTCTGCAGACGGGCCCCGGTGCATGCCCCGGTCTTCGCGGTAGCGGTGGAGGTGAACGG  
GCTCACGTTTCAGGGGCACAGGCCCCACCAAGAAGAAGGCCAAGATGCGCGCGCGGAGCTGGCACTCAGGTCTCT  
CGTGCAGTTCCCCAACGCTGCCAGGCGCACCTGGCCATGGGCGGGGGCCCGGGCCCCGGCACGGACTTACCTC  
CGACCAGGCCGATTTCCCCGACACGCTCTTCCAGGAGTTCGAGCCCCCGCGCGCGCCCGGACTCGCGGGAGG  
CCGCCCCGGGGACGCGCGCTTCTGTCCGCGGCTACGGGCGACGGCGGCTGCTGTGCCGCGCGCTGGACCTGGT  
GGGCCCCGACCCCGCCACCCCGCGGCCCCGGGCGAGCGCAACCCCGTGGTGTCTGTAACCGCTGCGCGCCGG  
GCTGCGCTACGTGTGTCTGGCAGAACCGGCCGAGCGGCGCGCGGAGCTTCGTGATGGCCGTGAGCGTGGACGG  
CAGGACGTTTCAGGGGCTCGGGGCGCAGCAAGAAGTGGCCCCGGGTGAGGCCGCGCAGGCCGCACTGCAGGAGCT  
GTTTCGACATCCAGATGCCCGGCCACGCGCCCGGCGAGGCCAGGAGGACGCCAATGCCGAGGAATTCGAGACTC  
CATATCCCAGCTGGTCACACAGAAGTCCGCGAGGTGACGACGGACCTCACGCCATGCACGCCCGCCATAAAGC  
GCTGGCAGGAATCGTCATGACCAAGGCCTGGATGCTCGGCAGGCGCAGGTCTGTGGCCCTGTCTCGGGGACCA  
GTGCATCAGCGCGGAGCACCTCAGTGACAGGGGCTGGTGGTGAATGACTGCCACGCGGAGGTCTGTGGCCCGCG  
GGCGTTCTCTGCACTTCTCTACACGAGCTGGAGCTGCACTGAGCAAGCGGCGGAGGACTCAGAGCGATCGAT  
ATTCTGTGGGTTAAAGAAGGTGGCTACCGGCTGCGAGAGAATCCTCTTCCATCTCTACGTGAGCACCTCCCC  
CTGTGGAGACGCAAGACTCCACTCTCCCTACGAGATCACCACAGACCTGCACAGCAGCAACACCTCGTCAGGAA  
GTTCCGCGGGCACCTGCGCACCAAGATCGAGTCCGGGAAGGGACGGTCCCCGTGCGTGCCCCAGCGCAGTGCA  
GACCTGGGACGGCGTCTGTCTGGGGGAGCAGCTGATCACCATGTCTGCACGGACAAGATCGCCAGGTGGAACGT  
CCTGGGGTGCAGGGGCGCTCCTGTCCCACTTCGTGGAGCCCCGTGTACCTGCAGAGCATCGTGGTGGGCAGCCT  
GCACCACAGGGCCACCTCGCACGCGTCATGAGCCACCGCATGGAGGGTGTGCGCCAGCTGCCCCGCTCTACCG  
GCACAACCGGCTCTCTCAGCGGCGTGAGTGACGCCGAGCGCGCCAGCCGGGGGAAGTCGCCCCCTTACGAT  
GAAGTGGGTCTGTGGGCAGCGCGGACCTGGAGATTATCAACGCCACCACTGGGCGGAGGAGCTGTGGGGGGCCATC  
CCGGCTCTGCAAGCACGTGTCTGTGACGGTGGGCGCGGCTGTATGGCAGGCTGAGCACACGGACACCCAGCCC  
TGGAGACACGCCCTCCATGTACTGTGAGGCCAAGCTGGGGGCGCACACCTACCAGTCTGTGAAACAGCAGCTGTT  
CAAGGCCTTTCAGAAGGCTGGCCTGGGCACCTGGGTGAGGAAACCACCGAGCAGCAGAGTTTCTACTGACTCT  
**CTAGG**CTGCGGGCTCCTGGCTGTCTGGAGCTGAGCGGGACGCTGGAGGGATGGGACCGTGTCTGGGGGGCGACGTG  
GCGGGTGGCCGGTTCCCTGCATTCTTTTACTTTGGTGTCCCAGAAACACGCGAGTGTGCAATGTTTGGACGAG  
CAACAACACAAATTCAGAACGTGCCTCTTTCCAGATCGCTGGCCCCAGAACCTGTCCCCACACCCAGGGGCAC  
ACGCACCGTTGAGTTAGCGCCGACTCTTCTGTGGAGTCTGAGGGAGGGGCTCCATTACGGCAAAGGGGTTTTAG  
CTGCAGCCTTGAAGGAGGCACCGACACGACACAGGCAGGAGTGAGCCTCAGGCCCGCTCCCTGCACCCACCC  
CTGCGTGGCCTCTTGGTGTGCTGGGGTCTACTAGCTTGGGGGCGACATGAAGATAAGCCACAAATGAAGAG  
AAAAGCCATGCCACCCAGCCCCAGAGAAACCAATAAGAATCCTCTATTATTTTACTATTCTGTTTAGGTTTTT  
ATACTCCACCTCCTTTCAAAAAAGATTTAAGATGTACGACATTACCGAACACCTAAAATAGAACCAGAGAAACGA  
AAGCCATTCCCAAAAGTGAAGGAACAGTTTCAAAAACCCCTGCGAGGCAGAGTTAAGACCTGTGACGTGGGGAG  
CCTGGAAACACCTGGCCCACGCGTGTGCAGATGTGGGGAGCCTGGAAACACCCGGCCACGCGTGTGCAGATG  
TGGGGAGCCTGGAAACACCCGGCCACGCGTGTGCAGATGTGGGGAGCCTGGAAACACCCGGCCACGCGTGTCT  
GTAGATGTGGGGAGCCTGGAAACCTGGCCCACGCGTGTGCAGATGTGGGGAGCCCGGAAACACCTGGCCCAT  
GCCTGTTAGTCCGTATGGCGTTTGGTTTATGGTGGCCGATACTAAGAGCCACTGAGGTCTGGGTGTGTGAGG  
GTTAGCTACCACCTATAACCTCCCTACCAGTAATAAGGAGACCAAGTCTTTGATCAAATCTGATTTTTTAAC

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**FIGURE 2213B**

TAAATTTTCATTAGAAAGCAAGCACAAAATAAAATCAAACAACCTTTACCTTCA



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**FIGURE 2214**

MASVLGSGRGSGGLSSQLKCKSKRRRRRRSKRKDKVSILSTFLAPFKHLSPGITNTEDDDTLSTSSAEVKENRNV  
GNLAARPPPSGDRARGGAPGAKRKRPLEEGNGGHLCKLQLVWKKLSWSVAPKNALVQLHELRLPGLQYRTVSQTGP  
VHAPVFVAVEVNGLTFEGTGPTKKKAKMRAELALRSFVQFPNACQAHLAMGGGPGPGTDFTSDQADFDTLQ  
EFEPPAPRPGLAGGRPDAALLSAAYGRRRLLCRALDLVGPTPATPAAPGERNPVLLNRLRAGLRYVCLAEPAE  
RRARSFVMAVSVDGRTFEGSGRSKKLARGQAAQALQELFDIQMPGHAPGRARRTPMPQEFADSIQVLTQKFRE  
VTTDLTPMHARHKALAGIVMTKGLDARQAQVVALSSGTCISGEHLSQGLVVNDCHAEVVARRAFLHFLYTQLE  
LHLSKRREDSERSIFVRLKEGGYRLRENILFHLYVSTSPCGDARLHSPYEITDLHSSKHLVRKFRGHLRTKIES  
GEGTVPVRGPSAVQTDGVLLGEQLITMSCTDKIARWNVLGLQGALLSHFVEPVYLSIVVGSLLHHTGHLARVMS  
HRMEGVGQLPASRYRHNRPLLSGVSDAEARQPGKSPFMSMNWVGSADLEIINATTGRRSCGGPSRLCKHVLSARW  
ARLYGRLSTRTPSPGDTPSMYCEAKLGAHTYQSVKQQLFKAFQKAGLGTWVRKPPEQQQFLTL

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**FIGURE 2215**

ATTTCATGTTATACTTAATAAAACAAAACATACCTGTATACACACACATTCACTCACATTGAAGATGCAAGATGA  
AGAAAGATACATGACATTGAATGTACAGTCAAAGAAAAGGAGTTCTGCCCAAACATCTCAACTTACATTTAAAGA  
TTATTTCAGTGACGTTGCACTGGTATAAAATCTTACTGGGAATATCTGGAACCGTGAATGGTATTCTCACTTTGAC  
TTTGATCTCCTTGATCCTGTTGGTTTCTCAGGGAGTATTGCTAAAATGCCAAAAGGAAGTTGTTCAAATGCCAC  
TCAGTATGAGGACACTGGAGATCTAAAAGTGAATAATGGCACAAGAAGAAATATAAGTAATAAGGACCTTTGTGC  
TTTCGAGATCTGCAGACCAGACAGTACTATGCCAATCAGAATGGCTCAAATACCAAGGGAAGTGTATTGGTTCTC  
TAATGAGATGAAAAGCTGGAGTGACAGTTATGTGTATTGTTGGAAAGAAAATCTCATCTACTAATCATACATGA  
CCAACCTTGAAATGGCTTTTATACAGAAAAACCTAAGACAATTAAACTACGTATGGATTGGGCTTAACCTTACCTC  
CTTGAAAATGACATGGACTTGGGTGGATGGTTCTCCAATAGATTCAAAGATATTCTTCATAAAGGGACCAGCTAA  
AGAAAACAGCTGTGCTGCCATTAAGGAAAGCAAAATTTTCTCTGAAACCTGCAGCAGTGTTCCTCAATGGATTG  
TCAGTATTAAGAGTTTGACAAAATTCACAGTGAAATAATCAATGATCACTATTTTGGCCTATTAGTTTCTAATAT  
TAATCTCCAGGTGTAAGATTTTAAAGTGCAATTAAATGCCAAAATCTCTCTCCCTTCTCCCTCCATCATCGACA  
CTGGTCTAGCCTCAGAGTAACCCCTGTTAACAACTAAAATGTACACTTCAAATTTTACGTGATAGTATAAAC  
CAATGTGACTTCATGTGATCATATCCAGGATTTTATTCGTCGCTTATTTTATGCCAAATGTGATCAAATATGC  
CTGTTTTTCTGTATCTTGCCTTTTAAATCTTAATAAGGTCCTAAACAAAATTTCTTATATTTCTAATGGTTGAA  
TTATAATGTGGGTTTATACATTTTTTACCCTTTTGTCAAAGAGAATTAACCTTTGTTTCCAGGCTTTTGCTACTCT  
TCACTCAGCTACAATAAACATCCTGAATGTTTCTTAAAAA

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**FIGURE 2216**

MQDEERYMTLNVQSKKRSSAQTSQLTFKDYSVTLHWYKILLGISGTVNGILTTLISLILLVSQGVLLKCQKGSC  
SNATQYEDTGLKVNNGTRRNISNKDLCASRSADQTVLCQSEWLKYQGKCYWFSNEMKSWSDSYVYCLERKSHLL  
IIHDQLEMAFIQKNLRQLNYVWIGLNFTSLKMTWTWVDGSPIDSKIFFIKGPAKENSCAAIKESKIFSETCSSVF  
KWICQY

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**FIGURE 2217**

AGCAGTGGCCCAAAGAGGAGCAGCAGACAAGAGTGCAGTGGTGGCTGCCGCCGCACCAGCCTCAGTGGCAGATGA  
CACACCACCCCCGAGCGTCGGAACAAGAGCGGTATCATCAGTGAGCCCCCTCAACAAGAGCCTGCGCCGCTCCCG  
CCCGCTCTCCCACTACTCTTCTTTTGGCAGCAGTGGTGGTAGTGCGGTGGCAGCATGATGGGCGGAGAGTCTGC  
TTGACAAGGCCACTGCGGCTGCAGCCTGGCCTTCCCTGTTGGCCAATGGGATGACCTGGCGGCGGCCATGGCGGT  
GGACAAAAGCAACCCTACCTCAAAGCACAAAAGTGGTGTGTGGCCAGCCTGCTGAGCAAGGCAGAGCGGGCCAC  
GGAGCTGGCAGCCGAGGGACAGCTGACGCTGCAGCAGTTTGCGCAGTCCACAGAGATGCTGAAGCGCGTGGTGCA  
GGAGCATCTCCCGCTGATGAGCGAGGCGGGTGCTGGCCTGCCTGACATGGAGGCTGTGGCAGGTGCCGAAGCCCT  
CAATGGCCAGTCCGACTTCCCCTACCTGGGCGCTTTCCCCATCAACCCAGGCCTCTTCATTATGACCCCGGCAGG  
TGTGTTCTGGCCGAGAGCGCGCTGCACATGGCGGGCCTGGCTGAGTACCCCATGCAGGGAGAGCTGCCTCTGCC  
ATCAGCTCCGGCAAGAAGAAGCGGAAACGCTGCGGCATTGTGCGCGCCCTGCCGGCGGCGCATCAACTGCGAGCA  
GTGCAGCAGTTGTAGGAATCGAAAGACTGGCCATCAGATTTGCAAATTCAGAAAATGTGAGGAACTCAAAAAGAA  
GCCTTCCGCTGCTCTGGAGAAGGTGATGCTTCCGACGGGAGCCGCCTTCCGGTGGTTTCAGTGACCGGCGCGGAA  
CCCAAAGCTGCCCTCTCCGTGCAATGTCACTGCTCGTGTGGTCTCCAGCAAGGGATTCCGGCGAAGACAAACGGA  
TGCACCCGCTTTTGAACCAAAAATATTCTCTCACAGATTTTATTCTGTTTTATATATATATTTTTTGTGTGTC  
GTTTAAACATCTCCACGTCCCTAGCATAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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**FIGURE 2218**

MAVDKSNPTSKHKSGAVASLLSKAERATELA AEGQLTQQFAQSTEMLKRVVQEHPLMSEAGAGLPDMEAVAGA  
EALNGQSDFPYLGAFPINPGLFIMTPAGVFLAESALHMAGLA EYPMQGELPLPSAPARRSGNAAALCAPCRRRIN  
CEQCSSCRNRKTGHQICKFRKCEELKKKPSAALEKVMLPTGA AFRWFQ

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**FIGURE 2219**

CATTTGCTATGAATATTCTCTATAACAAAGCAAGACAAATTTAGCAGCACTTCATTGCATCTGGATGGGGGAGAG  
AGCTGGACAATTTCTTGCTAACAAGAGATGGTTAACTGCCCTCACCTCAGCCGTGAATTCTGCACACCTCGCATC  
CGGGGCAACACCTGCTTCTGCTGTGACCTCTACAACGTGGCAACCGGTGGAGATCACTGGTGGGTACTACGAA  
TACATCGATGTCAGCAGTTGCCAAGATATCATCCACCTCTACCACCTGCTCTGGTCTGCCACCATCCTCAACATT  
GTTGGCCTGTTTCTGGGCATCATCACTGCCGTGTCTTGGAGGCTTTAAGGACATGAACCAACTCTCCAGCA  
CTGAACGTCTGTTGTTGAAAATACCCATCCAACAGTTTCTTACTATGCTCATCCCCAAGTGGCATCCTACAATACC  
TACTACCATAGCCCTCCTCACCTGCCACCATATTCTGCTTATGACTTTCAGCATTCCGGTGTCTTTCCATCCTCC  
CCTCCCTCTGGACTTTCTGATGAGCCCCAGTCTGCCTCTCCCTCACCCAGCTACATGTGGTCTCAAGTGCACCG  
CCCCGTTACTCTCCACCCTACTATCCACCTTTTGAAGGCCACCACCTTACAGTCCC**TAA**AGAGGAATGCCTGCT  
GGCTATTGAGATTATTGTGGCTTTTGTATTCTGCTTCACTGGAAGTGTGTAGGGTACAAAATTTAAAGTGTGAC  
TCTTATGCATAAAGTTTACAATGGCCTGCCAGGCTAGGGAAAGATAGGGACGAAGCTTATTCAATTATTAGTGCA  
GAGCAGGGGTGGTCAGGCTGAACGCAGCACAGAAGGGCAGCTCACATTCTTAAGCAAGACTGGGGAGCCAGCCC  
AGCAAGAAGCTTGTTTGGACTTGCAATTACCCTATGCTCCACCTCTGTATTCAAGCAGAAGTGTGGTTGCCATCTTT  
TTCACCTTATGTAAAGGAGTGTGGCCTCGGGCCCTTGGCAGATTGCCACCCAGCACCTAGGTTGAAGCACCTG  
GTTTATAGGCCCTATCTTTCCCTACCCCTAAAGTCAGTCCCTAAGGACAATTTCCAGCTGATGGGGCTACACAG  
TAGTTCCAATACAGAGAGTTCTGGCTAAGATTTTGTGTGCTGCTGGATGTTGAAAAAGACTGCCCGTATCT  
CTTACTCCTTCTCTCTGTGAGTATTGTAAAAATGGCTGTTGTGATCACTCAGCTCAGCTTTTGTATTGGTAC  
CTCCTAAAGGGAAAAGTGCAATATTCTTGCATCTTCACTAGTGGGGAACAGGATGTATTGTCCGGAAACACTGA  
AATACACAGCAACATGTGAGATGTTTTAAGTAGATCACTTAGGAGACAGTGGTCTACTACATGTTGCATTATTA  
CAAAATACATTGCTACAGGAGATATAAATCTTATGTTGTAATTCAGAGTTAAAAATGTTATAAATTAGGTTT  
TTGGGTCTGATATGAATTGTTACTAATCTTGTGACTATTTAATCTTCAAATATTGTGCTTAACCCAGCAATC  
CGCACGTATCCTGCACCCACCCAAAAGAGTCATCTGTATTTAATGCCACTGGTCTTATCGGTCTTTTGTCT  
GTTGAGACCAGTCATGACAGCATTCAAGATTATGAAAGTGTACAATGCCGCTTCAAGTCTGCAAAACCTCAAAC  
GTAGCCAACCTGACAAATATTTAAGTGTACGGCAGATTTAAATCCATCTGGCACACCGTGGTAGGTATTTGTA  
CAGTTCTTTTAAATTACACATAGCTTTAAACCATCAACCTGATGAGTTTAAAGCTTTTGACCCCATGCCTTCACCT  
CAGAATGAACACCTTCATTGTGATCTTATGTTAACCTGAGAATTGATTTAAAGGAAGATTGATAATCCTATACCT  
TATAACGTAAAAATACAGGGGTACAGGAGGGTACCTAATTAGACAGTTCTCCAAACACAGAACACACACTGGAA  
AATTTTCCGGCCAATTTTGTACCTCCCAACTTGATGGATTAGAGGTAGCGCATATGCTGGTGTCTCCCATCTACC  
TTGTAGACACTTAGCCATCAAGAATCAAGGCACAAGAAGTGCACCTCTCTCATTAAACAGTAAATGTTTGAAGATA  
TTCAGTTTAACTTTCAGCATCATGAATGTTCTTATCCAGATTTTGAATCCGAAAACTATAATCCTTTTATGTTA  
TACAAAATTACTATGATTTTTTACAGTTCTGAGCATATTAAAATCTACTGGATTTCAAAAAGAGACTAATACCC  
AACTGACTAACTAAACAAATATCAACTTGTAATACTCAATGAATTTTTTGGCAATTTACATTTGACCGTTGGCTT  
TAGTGAATGTCCATATTTAATTTTTTAAGGCACCATTACACAGTTTATCCTACATTTATCACATTTCTTAAAGTG  
TTAAGATTCTATGGCTCATTTCTATGTATTTTCTTACTTTACAAAATAACCTGAAACAGTATAGATTTTGTAAAC  
ACTTAATTTGAGCAGCTTTTTTATTACATTGAATTATATAAAGTGCATGTTACCTTAGAAAAATTAGTATTTGCT  
GCTTTACTCTTTTGCAAAACATTTGCTGTAATGAATGGATTTGTATTTCCAATATGTATCTTGACTGCATTTTGT  
AATATTTACTGCTTTATTCCTAATTCTGCTTTAAAGTACTGAACCTGGGCATGAAACATTAAAAATTAATCCAGA  
AACTGTATAAACTGGATGTTGCTTAAATCTGTATCACTGCCATGTTGAAAATTCAGACTGCTTTTGTGATGTTT  
CAAATGAATAAACTATCCTCCCTCGTT

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**FIGURE 2220**

MVNCPHLSREFCTPRIRGNTCFCCDLYNCGNRVEITGGYYEYIDVSSCQDIHLYHLLWSATILNIVGLFLGIIT  
AAVLGGFKDMNPTLPALNCSVENTHPTVSYAHQVASYNTYYHSPPHLPPYSAYDFQHSGVFPSSPPSGLSDEP  
QSASPSPSYMWSSSAPPRYSPPYPPFEKPPPYSP

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**FIGURE 2221**

CCACGCGTCCGGCACCGGCAGCACCATGTTGCTCATGGTCGTCAGCATGGCGTGTGTTGGGTTCTTCTTGGTCCA  
GAGGGCCGGTCCACACGTGGGTGGTCAGGACAAGCCCTTCTGTCTGCCTGGCCCAGCGCTGTGGTGCCTCGAGG  
AGGACACGTGACTCTTCGGTGTCACTATCGTCATAGGTTAACAATTTTCATGCTATACAAAGAAGACAGAATCCA  
CGTTCCCATCTTCCATGGCAGATTATTCCAGGAGAGCTTCAACATGAGCCCTGTGACCACAGCACATGCAGGGAA  
CTACACATGTCCGGGTTTACACCCCACTCCCCACTGGGTGGTCGGCACCCAGCAACCCCGTGGTGATCATGGT  
CACAGGAAACCACAGAAAACCTTCCCTCCTGGCCCACCCAGGTCCCCTGGTGAAATCAGGAGAGAGAGTCATCCT  
GCAATGTTGGTCAGATATCATGTTTGAGCACTTCTTTCTGCACAAAGAGGGGATCTCTAAGGACCCCTCAGGCCT  
CGTTGGACAGATCCATGATGGGGTCTCCAAGGCCAATTTCTCCATCGGTCCCATGATGCTTGCCCTTGACAGGAC  
CTACAGATGCTACGGTTCTGTACTCACACCCCTATCAGTTGTCAGCTCCCAGTGATCCCCTGGACATCGTGGT  
CACAGGTCCATATGAGAAACCTTCTCTCTCAGCCCAGCCGGGCCCCAAGGTTTCAGGCAGGAGAGAGCGTGACCTT  
GTCCTGCAGCTCCCGGAGCTCCTATGACATGTACCATCTATCCAGGGAGCGGGGAGCCCATGAACGTAGGCTCCC  
TGCAGTGCGAAGGTCAACAGAACATTCCAGGCAGATTTCCCTCTGGGCCCTGCCACCCACGAGGGACCTACAG  
ATGCTTCGGCTCTTTCCGTCACTCTCCCTACGAGTGGTCAGACCCGAGTGACCCACTGCTTGTTTCTGTACAGG  
AAACCCCTTCAAGTAGTTGGCCTTCACCCACAGAACCAAGCTCCAAATCTGGTAACCCACAGACCTGCACATTCT  
GATTGGGACCTCAGTGGTCATCATCCTCTTCATCCTCCTCCTCTTCTTTCTCCTTCATCTCTGGTGCTCCAACAA  
AAAAAATGCTGCTGTAATGGACCAAGAGCCTGCAGGGAACAGAACAGCCAACAGCGAGGACTCTGATGAACAAGA  
CCCTGAGGAGGTGACATACGCACAGTTGGATCACTGCGTTTTACACAGAGAAAAATCACTCGCCCTTCTCAGAG  
GCCCCAAGACACCCCTACAGATACCATCTTGACACGGAACCTCCAAATGCTAAGCCCAGATCCAAAGTTGTCTC  
CTGCCCCTGAGCACCACAGTCAGGCCTTGAGGACGTCTTCTAGGGAGACAACAGCCCTGTCTCAAAACCGAGTTG  
CCAGCTCCCATGTACCAGCAGCTGGAATCTGAAGGCGTGAGTCTTCATCTTAGGGCATCGGTCCCTCCTCAGGCCA  
CAAATCTGGTGCCTCTCTCTTGCTTACAAATGTCTAGGTCCCCACTGCCTGCTGGAAAGAAAACACACTCCTTTG  
CTTAGCCACAGTTCTCCATTTCACTTGACCCCTGCCACCTCTCCAACCTAACTGGCTTACTTCCTAGTCTACT  
TGAGGCTGCAATCACACTGAGGAACTCACAATTCAAACATACAAGAGGCTCCCTCTTGACGTGGCACTTACCCA  
CGTGCTGTTCCACCTTCCCTCATGCTGTTTCACCTTCTTCGGACTATTTTCCAGCCTTCTGTGACAGTGAAC  
TTATAAAATTTTTTGTGATTTCATGTAGCTGTCTCCTCTTCAAATAAACATGTCTGCCCTCCAA



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**FIGURE 2222**

MLLMVSMACVGFFLVQRAGPHVGGQDKPFLSAWPSAVVPRGGHVTLRCHYRHRFNNFMYKEDRIHVPIFHCRL  
FQESFNMSPVTTAHAGNYTCRGSHPHSPTGWSAPSNPVVIMVTGNHRKPSLLAHPGPLVKSGERVILQCWSDIMF  
EHFFLHKEGISKDPSRLVGQIHDGVSKANFSIGPMMLALAGTYRCYGSVTHTPYQLSAPSDPLDIVVTGPYEKPS  
LSAQPGPKVQAGESVTLSCSSRSSYDMYHLSRERGAHERRLPAVRKVNRTFQADFPLGPATHGGTYRCFGSFRHS  
PYEWSDPDPLLVSVTGNPSSSWPSPTEPSSKSGNPRHLHILIGTSVVIILFILLFFLLHLWCSNKKNAAVMDQ  
EPAGNRTANSEDSDEQDPEEVTYAQLDHCVFTQRKITRPSQRPKTPPTDTILYTELPNAKPRSKVVSCP

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**FIGURE 2223**

TTCCTCAGAAACGAGCAAACCTGAAAGCTACTCTCTCAGCTTCAGAGGGAAAAATGTTGTAGATTTCTGGACT  
TGGGAGCAGACATTTCAAGAACTAATCCAAGAGGCAAAACCCGGGCCACATGGACGCTGAAGTTGGATGGCAAC  
CTTCAGCTAGACTGCCTGGCTCAAGGGTGGGAAGCAATACCAACAGAGAGCATTGGCTGGTTCCGGTGTTCCTCC  
TGCCAGCGAAGTTGGGCTTCCGCCAAGTTGCAGATTCTGTGCCACACGTAAGTGGGAGCACTGGACATCCCAGGGT  
CAGGTGCGTATGAGGCTCTTTGGCCAAAGGTGCCAGAAGTGCTCCTGGTCCCAATATGAGATGCCTGAGTTCTCC  
TCGGATAGCACCATGAGGATTCTGAGCAACCTGGTGCAGCATATACTGAAGAAATACTATGGAAATGGCATGAGG  
AAGTCTCCAGAAATGCCAGTAATCCTGGAAGTGTCCCTGGAAGGATCCCATGACACAGCCAATTGTGAGGCATGC  
ACTTTGGGCATATGTGGACAGGGCTTAAAAAGCTACATGACAAAGCCGTCCAAATCCCTACTCCCCACCTAAAG  
ACTGGGAATTCCTCACCTGGAATTGGTGCTGTGTACCTCGCAAACCAAGCCAAGAACCAGTCAGATGAGGCAAAA  
GAGGCTAAGGGGAGTGGGTATGAGAAATTAGGGCCCAGTCGAGACCCAGATCCACTGAACATCTGTGTCTTTATT  
TTGCTGCTTGTATTTATTGTAGTCAAATGCTTTACATCAGAAATGATGAAAATAGGCTTGCCACTTTCTCTTATT  
TAATTCCATGGTAGTCAATGAAGTGGCTGCCACTTAAATATAACTGAAAATTCATTTTGAGACCAAGCAGGATCA  
AGTTTGTAGAATAAACACTGGTTTCCTAGCTATCCTCTGAAAACAGTATGAAACATGACCAAGTACATAATGGAT  
TTAGTAATAAATATTGTCGAATTGCTAAAAA

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**FIGURE 2224**

MVVDFTWEQTFQELIQEAKPRATWTLKLDGNLQLDCLAQGWKQYQQRAFGWFRCSQQRSWASAKLQILCHTYW  
EHWTSQGQVRMRLFGQRCQKCSWSQYEMPEFSSDSTMRIISNLVQHILKKYYGNGMRKSPEMPVILEVSLEGSHD  
TANCEACTLGICGQGLKSYMTPSKSLLPHLKTGNSSPGIGAVYLANQAKNQSDEAKEAKGSGYEKLGPSRD PDP  
LNICVFILLLVFIVVKCFTSE

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**FIGURE 2225**

TAATAGTCACATGACACGTTTCCCGTCAAGATGCGGATACTCTCCCTTCGGAGTTTGATGTGATCGTAATAGGG  
ACGGGTTTGCCTGAATCCATCATTGCAGCTGCATGTTCAAGAAGTGGCCGGAGAGTTCTGCATGTTGATTCAAGA  
AGCTACTATGGAGGAACTGGGCCAGTTTGTAGCTTTTCAGGACTATTGTCTGGCTAAAGGAATACCAGGAAAAAC  
AGTGACATTGTAAGTGACAGTCCAGTGTGGCAAGACCAGATCCTTGAAAATGAAGAAGCCATTGCTCTTAGCAGG  
AAGGACAAAACATTCAACATGTGGAAGTATTTTGTATGCCAGTCAGGATTTGCATGAAGATGTCGAAGAAGCT  
GGTGCACTGCAGAAAAATCATGCTCTTGTGACATCTGCAAACTCCACAGAAGCTGCAGATTCTGCCTTCCTGCCT  
ACGGAGGATGAGTCATTAAGCACTATGAGCTGTGAAATGCTCACAGAACAACTCCAAGCAGCGATCCAGAGAAT  
GCGCTAGAAGTAAATGGTGCTGAAGTGACAGGGGAAAAAGAAAACCATTTGTGATGATAAACTTGTGTGCCATCA  
ACTTCAGCAGAAGACATGAGTGAAAATGTGCCTATAGCAGAAGATACCACAGAGCAACCAAAGAAAAACAGAATT  
ACTTACTCACAAATTATTAAGAAGGCAGGAGATTTAATATTGATTTAGTATCAAAGCTGCTGTATTCTCGAGGA  
TTACTAATTGATCTTCTAATCAAATCTAATGTTAGTCGATATGCAGAGTTAAAAATATTACCAGGATTCTTGCA  
TTTCGAGAAGGACGAGTGGAACAGGTTCCGTGTTCCAGAGCAGATGCTTTAATAGCAAACAACCTTACTATGGTA  
GAAAAGCGAATGCTAATGAAATTTCTTACATTTTGTATGGAATATGAGAAATATCCTGATGAATATAAAGGATAT  
GAAGAGATCACATTTTATGAATATTTAAAGACTCAAAAATTAACCCCCAACCTCCAATATATTGTCATGCATTCA  
ATTGCAATGACATCAGAGACAGCCAGCAGCACCATAGATGGTCTCAAAGCTACCAAAAACTTTCTTCACTGTCTT  
GGGCGGTATGGCAACACTCCATTTTGTTCCTTTATATGGCCAAGGAGAACTCCCCCAGTGTTTCTGCAGGATG  
TGTGCTGTGTTTGGTGGAAATTTATTGCTTCGCCATTCACTACAGTGCCTGTAGTGGACAAAGAATCCAGAAAA  
TGTAAGCAATTATAGATCAGTTTGGTCAGAGAATAATCTCTGAGCATTCTCTGCGGAGGACAGTTACTTTCTT  
GAGAACATGTGCTCACGTGTGCAATACAGGCAGATCTCCAGGGCAGTGCTGATTACAGATAGATCTGTCTAAAA  
ACAGATTGAGATCAACAGATTTCCATTTTGACAGTGCCAGCAGAGGAACCAGGAACCTTTGCTGTTCCGGTCATT  
GAGTTATGTTCTTCAACGATGACATGCATGAAAGGCACCTATTTGGTTCAATTTGACTTGACATCTTCTAAAACA  
GCAAGAGAAGATTTAGAATCAGTTGTGCAGAAATTGTTTGTTCATATACTGAAATGGAGATAGAAAATGAACAA  
GTAGAAAAGCCAAGAATTCTGTGGGCTCTTTACTTCAATATGAGAGATTCTGTCAGACATCAGCAGGAGCTGTTAT  
AATGATTTACCATCCAACGTTTATGTCTGCTCTGGCCCAGATTGTGGTTTAGGAAATGATAATGCAGTCAACAG  
GCTGAAACACTTTTCCAGGAAATCTGCCCCAATGAAGATTTCTGTCCCCCTCCACCAAATCCTGAAGACATTATC  
CTTGATGGAGACAGTTTACAGCCAGAGGCTTCAGAATCCAGTGCCATACCAGAGGCTAACTCGGAGACTTTCAAG  
GAAAGCACAAACCTTGGAACCTAGAGGAGTCTCTGAATTAATGGATATACACCAAACCTGGATACCAAACCTTTGG  
AAATTCGACTGGTCTCAGAGTCTACTTGATAGAAGGACTGTTTGAGAAATGTTAGAAAGCAGCAGCAATTATAA  
GGCAAAATAGGTAAT

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**FIGURE 2226**

MADTLPSEFDVIVIGTGLPESIIAAACSRSGRRVLHVDSRSYYGGNWASFSGLLSWLKEYQENSDIVSDSPVW  
QDQILENEEAIALSRKDKTIQHVEVFCYASQDLHEDVEEAGALQKNHALVTSANSTEADSAFLPTEDESLSTMS  
CEMLTEQTPSSDPENALEVNGAEVTGEKENHCDDKTCVPSTSAEDMSENVPIAEDTTEQPKKNRITYSQIIEGR  
RFNIDLVSLLYSRGLLIDLLIKSNVSRYAEFKNITRILAFREGRVEQVPCSRADVFNKQLTMVEKRMLMKFLT  
FCMEYEKYPDEYKGYEEITFYEYLKTQKLTPNLQYIVMHSIAMTSETASSTIDGLKATKNFLHCLGRYGNTPFLE  
PLYGQGELPQCFCRMCAVFGGIYCLRHSVQCLVVDKESRKCKAIDQFGQRIIEHFLLVEDSYFPENMCSRQYR  
QISRAVLITDRSVLKTSDQQISILTVPAEPEGTFAVRVIELCSSTMTCMKGTYLVLHLCCTSSKTAREDLSEVQ  
KLFVPPYTEMEIENEQVEKPRILWALYFNMRDSSDISRSCYNDLPSNVYVCSGPDCLGNDNAVKQAETLFQEICP  
NEDFCPPPPNPEDIILDGDSLQPEASESSAIPANSETFKESTNLGNLEESSE

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**FIGURE 2227**

GGGTGCGCTCGGCCGTGGCGCACCTGGTGAGCTCCGGGGGCGCTCCGCCTCCGCGCCCCAAATCCCCGGACCTGC  
CCAACGCGCGCTCGGCGCGCGCCCGCCGCTCCAGAAGCGCCAGGAGCCCTCCCGCGAAGGCTGGGAGCGGGA  
GCGCGACGCGCCGGAAGGCTGTTGAGGCTCGAGCGAGCTTCTCCAGACCGACCTTTCTGCAGCTGAGCCCCGGG  
GGCTGCGACGCGCCGATGACCACGCGGGCCGGGCTGTGCAAAGCCCCCGACACGGGCCGCGCTGCCCTGGA  
GCACAGGCTACGCGGAGTGAGCGCCCCCTGGGGCACCCAAACCAGGATGGGGCTCCACCCCTCTCCCCAGCTCC  
GCATCCCCGGCGCTAGGACGCGTTCCCCACGCGCGCTCCGGGCCAGGAGCTCCCTTTCCGTGGACCTTTGCTAT  
CCTCTGGTCTTTCGGGCCGACCCCTCCCAACCCATTTCCAGTGGGGGCGAGCCTGTGTACCTTCTTCAGTCT  
CTTCCCGCTCATTGACTGCCCTCGCCACGCGCGCTCAGGACCCTGTTCTGCCCCAGAGCCCGAGGGCGGAGAG  
CCCGGCGAAGGATGAGTTGGCCAGTTCCCCGTCGCGGCCCGGCAGCTTAAAGGCTAAGGAAAAGGGTTTCACG  
AAGGAGCGGGTTCTTTTAATAGGGGACATAGCGGTTGGGAAGACTCGCTCACCCGCTCCCGGCTCCAGCGCC  
CCAGTTCCCTGTCCCTCTTACCGTAGTTCCCTCCCGCTCCACACCCAGAAATAGCCCGGACACCCAGGAGGCCG  
CCAGCTTCCCCAGGAGCGGGGAGGGGACGCGCGGGGTAGAGGAGGGTCCCATTTAGATGCCCTTCAGCCTGCCA  
ACTCGTGCTGGCCTGGCAAAGAAGCGGACCCCTGCCGAGCGCGCGGCTGGCCCCGGGCTGTGTGTATTTTA  
AATGCATCTGCCGGAACGCAGAGCACCGAGGGAGATGGGGGCGCTCAGTTCGCTGAGGAAGGTGGCTGGTGCC  
CATGGACCCACCACCTCCCTTAGCCTCCTGTGTGGGAGGAGTTTATGGGTATGTGGCTCCTGCCAGTCCAG  
GTGGGCTTTCACCTTCTACTCTATTTTCAGTTCCTCTTTCCGATCTGGGCTGGAGAGCTTCTCATTGTTAAGGCA  
GCAGAACTTTCGCTGGATGGTTTTAGGATAAGGGGTCATCAATGCTGGCAAGAGTCGGCACAATGAGGACCAGG  
CTTGCTGTGAAGTGGTGTATGTGGAAGGTCGGAGGAGTGTACAGGAGTACCTAGGGAGCCTAGCCGAGGCCAGG  
GACTCTGCTTCTACTACTGGGCCTATTTGATGGGCATGCAGGGGGCGGAGCTGCTGAAATGGCCTCACGGCTCC  
TGCATCGCCATATCCGAGAGCAGCTAAAGGACCTGAAGGAAGTGAGCCACGAGAGCCTGGTAGTGGGGGCCATTG  
AGAATGCCTTCCAGCTCATGGATGAGCAGATGGCCCCGGGAGCGCGTGGCCACCAAGTGGAGGGGGGCTGCTGTG  
CACTGGTTGTGATCTACCTGCTAGGCAAGGTGTACGTGGCCAATGCAGGCGATAGCAGGGCCATCATTGTCCGGA  
ATGGTGAAATCATTCCAATGTCCCGGAGTTTACCCCGGAGACTGAGCGCCAGCGTCTTCAGCTGCTTGGCTTCC  
TGAAACCAGAGCTGCTAGGCAGTGAATTCACCCACCTTGAGTTCCCCCGCAGAGTCTGCCCAAGGAGCTGGGGC  
AGAGGATGTTGTACCGGGACCAGAACATGACCGGCTGGGCCTACAAAAAGATCGAGCTGGAGGATCTCAGGTTTC  
CTCTGGTCTGTGGGGAGGGCAAAAAGGCTCGGGTGATGGCCACCATTGGGGTGACCCGAGGCTTGGGAGACCACA  
GCCTTAAGGTCTGCAGTTCCACCCTGCCCATCAAGCCCTTTCTCTCCTGCTTCCCTGAGGTACGAGTGTATGACC  
TGACACAATATGAGCACTGCCAGATGATGTGCTAGTCTGGGAACAGATGGCCTGTGGGATGTCACTACTGACT  
GTGAGGTAGCTGCCACTGTGGACAGGGTGCTGTGGCCTATGAGCCTAATGACCACAGCAGGTATACAGCTCTGG  
CCCAAGCTCTGGTCTGGGGGCCCGGGGTACCCCCGAGACCGTGGCTGGCGTCTCCCCAACAAAGCTGGGTT  
CCGGGGATGACATCTCTGTCTTCGTCTATCCCCCTGGGAGGGCCAGGCAGTTACTCCTGAGGGGCTGAACACCATC  
CCTCCCACTAGCCTCTCCATACTTACTCCTCTCACAGCCCAAATTCTGAAGTTGTCTCCCTGACCCTTCTTTAGT  
GGCAACTTAAGTGAAGAAGGGATGTCCGCTATATCCAAAATTACAGCTATTGGCAAATAAACGAGATGGATAAAA  
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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**FIGURE 2228**

MASRLLRHIREQLKDLKEVSHESLVVGAIENAFQLMDEQMARERRGHQVEGGCCALVVIYLLGKVYVANAGDSR  
AIIVRNGEIIIPMSREFTPETERQRLQLLGFLKPELLGSEFTHLEFPRRVLPKELGQRMLYRDQNMTGWAYKKIEL  
EDLRFPLVCGEGKKARVMATIGVTRGLGDHSLKVCSSILPIKPFLSCFPEVRVYDLTQYEHCPDDVLVLGTDGLW  
DVTTDCEVAATVDRVLSAYEPNDHSRYTALAQAALVLGARGTPRDRGWRLPNNKLGSGDDISVFVPLGGPGSYS

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**FIGURE 2229**

GCACAGACAGCACCA**ATG**TCGCTCATGGTCGTCAGCATGGCGTGTGTTGGGTTCTTCTTGCTGCAGGGGGCCTGGC  
CACATGAGGGAGTCCACAGAAAACCTTCCCTCCTGGCCACCCAGGTCGCCTGGTGAAATCAGAAGAGACAGTCA  
TCCTGCAATGTTGGTCAGATGTCAGGTTTGAGCACTTCTTCTGCACAGAGAAGGGAAGTTTAAGGACACTTTGC  
ACCTCATTGGAGAGCACCATGATGGGGTCTCCAAAGCCAACCTTCTCCATCGGTCCCATGATGCAAGACCTTGCAG  
GGACCTACAGATGCTACGGTTCTGTTACTCACTCCCCCTATCAGTTGTCAGCTCCCAGTGACCCTCTGGACATCG  
TCATCACAGGTCTATATGAGAAAACCTTCTCTCTCAGCCCAGCCGGGCCCCACGGTTCTGGCAGGAGAGAGCGTGA  
CCTTGTCTGTCAGCTCCCGGAGCTCCTATGACATGTACCATCTATCCAGGGAGGGGGAGGCCCCATGAATGTAGGT  
TCTCTGCAGGGCCCCAAGGTCAACGGAACATTCCAGGCCGACTTTCTCTGGGGCCCTGCCACCCACGGAGGAACCT  
ACAGATGCTTCGGCTCTTTCCGTGACTCTCCATACGAGTGGTCAAACCTCGAGTGACCCACTGCTTGTTTCTGTCA  
TAGGAAACCCCTTCAAATAGTTGGCCTTCACCCACTGAACCAAGCTCTAAAACCGGTAACCCCCGACACCTGCACA  
TTCTGATTGGGACCTCAGTGGTCATCATCCTCTTCATCCTCCTCTTCTTTCTCCTTCATCGCTGGTGCTCCAACA  
AAAAAATGCTGCGGTAATGGACCAAGAGTCTGCAGGGAACAGAACAGCGAATAGCGAGGACTCTGATGAACAAG  
ACCCTCAGGAGGTGACATACACACAGTTGAATCACTGCGTTTTACACAGAGAAAAATCACTCGCCCTTCTCAGA  
GGCCCCAAGACACCCCCAACAGATATCATCGGTACGCGGAACCTTCAAATGCTGAGTCCAGATCCAAAGTTGTCT  
CCTGCCCC**TGA**GACCCACAGTCAGGCCCTGAGGGCGTCTTCTAGGGAGACAACAGCCCTGTCTCAAACCGGGTT  
GCCAGCTCCCATGTACCAGCAGCTGGAATCTGAAGGCATGAGTCTGCATCTTAGGGCATCGCTCTTCTCTCACACC  
ACAAATCTGAATGTGCCTCTCACTTGCTTACAAATGTCTAAGGTCCCCACTGCCTGCTGGAGAAAAAACACACTC  
CTTTGCTTAGCCACAGTTCTCCATTTCACTTGACCCCTGCCACCTCTCCAACCTAACTGGCTTACTTCTTAGT  
CTACTTGAGGCTGCAATCACACTGAGGAACTCACAATTCAAACATACAAGAGGCTCCCTCTTAACGCAGCACTT  
AGACACGTGTTGTTCCACCTCCCTCATGTGTTCCACCTCCCTCAGACTAGCTTTCAGTCTTCTGTGTCAGCAGT  
AAAACCTTATATATTTTTTAAATAA**ACTT**CAATGTAGTTTTCCATCCTTCAAATAAACATGTCTGCCCCCATG



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**FIGURE 2230**

MSLMVVSMACVGFFLLQGAWPHEGVHRKPSLLAHPGRLVKSEETVILQCWSDVRFEHFLHREGKFKDTLHLIGE  
HHDGVSKANFSIGPMMQDLAGTYRCYGSVTHSPYQLSAPSDPLDIVITGLYEKPSLSAQPGPTVLAGESVTLSGS  
SRSSYDMYHLSREGEAHECRFSAGPKVNGTFQADFPLGPATHGGTYRCFGSFRDSPYEWSNSSDPLLVSIGNPS  
NSWPSPTESPSSKTGNPRHLHLIGTSVVIILFILLFLLHRWCSNKKNAAVMDQESAGNRTANSEDSDEQDPQEV  
TYTQLNHCVFTQRKITRPSQRPKTPPTDIIVYAELPNAESRSKVVSCP

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**FIGURE 2231**

TAAAAC TTTAGGAAATTAGTACCAGACTTTTATATTGGTCAACAGCAAAATGAACATTACTACTCAGCCTCCAAC  
ACATGCAGTTTGCCTATACCAGGGATCCTGTCAAAATATACACCCTTATAGCTTCTTAAGTGCAGTTATCATAG  
AGCACAGTCCCTGACATCACACAGCTGCAGAGATGAATAAAACAAAGAGGAACCTACTCAGAAGTGAGTCTGGCCC  
AGGACCCAAAGAGGCAGCAAGGAACTTAAGGGCAATAAAATCTCCATTTAGGAACCAACAGGAAATATTCC  
AAGTAGAATTAAACCTTCAAAATGCTTCTTCGGATCATCAAGGGAATGACAAGACATATCACTGCAAAGGTTTAC  
TGCCACCTCCAGAGAAGCTCACTGCTGAGGTCCTAGGAATCATTTCGATTGTCCTGATGGCCACTGTGTTAAAAA  
CAATAGTTCTTATTCCCTTGTATTGGAGTACTGGAGCAGAACAATTTTCCCTGAATAGAAGAATGCAGAAAGCAC  
GTCATTGTGGCCATTGTCCTGAGGAGTGGATTACATATTTCAACAGTTGTTATTACATTGGTAAGGAAAGAAGAA  
CTTGGGAAGAAAGAGTTTGCTGGCCTGTGCTTCGAAGAACTCTGATCTGCTTTCTATAGATAATGAGGAAGAAAT  
GGTAAGACGTAAATGTTTCAACACTTTACTAAAAGCTTATTTCTGTCAATATCATATTTGTAGAAATCATCCATA  
TGTTTATACATATATTTACTTCATATATTTTAAGTCTGTGTAGTATTCAACTGACTTCATAATATTTTTATATT  
CATATACTGTTAATGCACATTGGTTATTTCCAGTTTTGCTTTTCATGGAAACCCATGCTTCTATAAATGTTTTT  
ATCACAAAATAAATATAAAGAAAAC TAAAAAAAAAACCAAAAAAAAAAAAAAAAAAAGGCGCCGCGATATAG

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**FIGURE 2232**

MNKQRGTYSEVSLAQDPKRQQRKLKGNKISISGTKQEIQVELNLQNASSDHQNDKTYHCKGLLPPEKLTAEV  
LGIICIVLMATVLKTIIVLIPCIGVLEQNNFSLNRRMQARHCGHCPEEWITYSNSCYIIGKERRTWEERVCPVL  
RRTLICFL

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**FIGURE 2233**

GGCGGCGGCAGCGGGTTGCGTTGCGCGTGGCGCACGGGGTGGGAGCGGAGCCCAGGCCGGGAGCAGGCGCCGCCG  
CCAGCGACC**AT**GGGGAACGTGTTGGCTGCCAGCTCGCCGCCCGCAGGGCCGCCACCGCCGCCTGCGCCGGCCCTC  
GTGGGGCTGCCGCCACCTCCGCCCTCGCCGCCGGGCTTCACGCTGCCGCCGTGGGAGGCAGCCTGGGCGCCGGC  
ACCACTACGAGTCGAAGTTCGGAACGGACCCCCGGGGCTGCAACCGCCAGCGCCTCAGGGGCCGCCGAGGATGGG  
GCCTGCGGCTGCCTGCCCAACCGGGGCACATTTCAGGAGTGCCACCGGAAGTGCAAGGAGCTGTTTCCATTTCAG  
ATGGAGGGTGTCAAGCTCACAGTCAACAAAGGGTTGAGTAACCATTTTCAGGTCAACCACACAGTAGCCCTCAGC  
ACAATCGGGGAGTCCAACCTACCACTTCGGGGTCACATATGTGGGGACAAAGCAGCTGAGTCCCACAGAGGCGTTC  
CCTGTACTGGTGGGTGACATGGACAACAGTGGCAGTCTCAACGCTCAGGTCATTACACAGCTGGGCCCCGGTCTC  
AGGTCCAAGATGGCCATCCAGACCCAGCAGTCGAAGTTGTGAACCTGGCAGGTGGACGGGGAGTATCGGGGCTCT  
GACTTCACAGCAGCCGTCACCTGGGGAAACCCAGACGTCCTCGTGGGTTTCAGGAATCCTCGTAGCCCACTACCTC  
CAGAGCATCACGCCTTGCTGGCCCTGGGTGGAGAGCTGGTCTACCACCGCGGCCCTGGAGAGGAGGGCACTGTC  
ATGTCTCTAGCTGGGAAATACACATTGAACAACCTGGTTGGCAACGGTAACGTTGGGCCAGGCGGGCATGCACGCA  
ACATACTACCACAAAGCCAGTGACCAGCTGCAGGTGGGTGTGGAGTTTGAGGCCAGCACAAGGATGCAGGACACC  
AGCGTCTCCTTCGGGTACCAGCTGGACCTGCCCAAGGCCAACCTCCTCTTCAAAGGCTCTGTGGATAGCAACTGG  
ATCGTGGGTGCCACGCTGGAGAAGAAGCTCCCACCCCTGCCCTGACACTGGCCCTTGGGGCCTTCCCTGAATCAC  
CGCAAGAACAAGTTTCAGTGTGGCTTTGGCCTCACCATCGGCT**TGAG**CCCTCCTGGCCCCCGCCTTCCACGCCCTT  
CCGATTCCACCTCCACCTCCACCTCCCCCTGCCACAGAGGGGAGACCTGAGCCCCCTCCCTTCCCTCCCCCTT  
GGGGTTCGGGGGGGGACATTGGAAAGGAGGGACCCCGCCACCCAGCAGCTGAGGAGGGGATTCTGGAAC**TGAAT**  
GGCGCTTCGGGATTCTGAGTAGCAGGGGCAGCATGCCAGTGGGCCTGGGGTCCCGGGAGGGATTCCGGAATTGA  
GGGGCACGCAGGATTCTGAGCACAGGGGCAGAGGCGGCCAGACAACCTCAGGGAGGAGTGTCTGGCGTCCCCA  
TCCTCCAAAGGGCCTGGGCCCCGCCCGAGGGGGCAGCGAGAGGAGCTTCCCCATCCCCGGTCAGTCCACCCTGCC  
CCGTCCACTTTCCCATCTCCTCGGTATAAATCATGTTTATAAGTTATGGAAGAACCGGGACATTTTACAGAAAAA  
AAACAAAAACAACAAAAATATACGTGGGAAAAAAAAAAAAAAAAAAAAA

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**FIGURE 2234**

MGNVLAASSPPAGPPPPAPALVGLPPPPSPPGFTLPPLGGSLGAGTSTSRSSERTPGAATASASGAAEDGACG  
CLPNPGTFEECHRKCKELFPIQMEGVKLTVNKGLSNHFQVNHTVALSTIGESNYHFGVTYVGTKQLSPTEAFPVL  
VGDMDNSGSLNAQVIHQLGPLRSKMAIQQQSKFVNWQVDGEYRGSDFTAATLGNPDVLVGSGILVAHYLQSI  
TPCLALGGELVYHRRPGEETVMSLAGKYTLNNWLATVTLGQAGMHATYYHKASDQLQVGVEFEASTRMQDTSVS  
FGYQLDLPKANLLFKGSVDSNWIVGATLEKKLPPLPLTLALGAFLNHRKNKFQCGFGLTIG

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**FIGURE 2235**

ACCTCCTGTACCTCTTAGCTTGTTAATTTTTTTTACAGCATTTATCAGTTTCCAGTTGTACCCCTACAATAATG  
TACGTTCCAAGTGCCTGAAATAGTGCCTAGCACATAATGTGTGAAACACACACACACACACATACCCATAA  
CCCCTGAATGAATGAAGAGAAACCGAAAAAATAAAAGTATAATATCCCATCCCTGATCACTCTCCAGAAATGTA  
TACTTCCAAGGAACCTGCATATTTCTATAGGTAGAATAATTGATGATGATAATAACAGTAATAGCTATATTTGAA  
TGTCATTATTTACACTAATATTCACAGCAACTCTGCAAAGTAGTTATTATGAAGAGACTGAGGTGCAGAGAAGA  
AAGTTCACATAACTGCTAGGTGCTGAAGCTGAGATTGTAACTATTGGATATCTGAATCCAGGGGTCATGCTCTT  
CCCATTAACTGCATTGTTATATTATTCACAAATGTAACAAATATCAAAGAAAATCTTGGCATTTCATTTTAA  
GAGGAATTAGGAAGGAAAACAAATAGGTATATAAAGGTCAGCCTAAGTTGTCAGCAATCTTTTTCCTTAATCTGT  
AAGAATCTTGCTCATCGATCAGGGTGCTGTTAATCACACTAGGTCCCAATCTCTTAATAAGGGAGTTGGGAGGGG  
TGTTTCATCTAGGACAGGAGTCATCAGACTCGGTAGAGTAATGAAAAGGATTATAATACTAATTTCTGAAGAG  
AATGTGGGACTGAAGCTAAAAATACTCACTATAAAGTAACTCTTTTGGCTATAGTCTATTATATCACAAAAATAT  
TATAAAAAATCCTCAGGTTCTTTCTATCTTCCACACCTAATTTTCAAACCGATCAATTTTTTAAAGCCACTTAA  
CCTGTGTGTAATTACTACTGTGGTCTCCTAGCACAGACAACAGCTGCTGACTGCTGTGGTATTGGCACGGATCAT  
GTAGTCTATAGAGAATTTGATAAAAAGACTCCAAACAATTTCAATGCCCTGTGCTGTTACAGAGGAGAACAAAATG  
CTTTCAGCAAGGATTTGAAAACCTCTCCGTCCCTGCAGGAAAGGATTGATGCTGATAGAAGAGCCTGGACAGATG  
TAATGAGAACTAAAGAAAACAGATGGCTGGAGATGACATTTATCCAGGGTCACTTTGTGTCAGGCCCTAGGACTTAA  
ATCGAAGTTGAACTTTTTTTTTTTAAACCAATAGATAGGGGAAGGGAGGGAGAGGGAGGACAGGGAGAGAAA  
ATACCATGCATAAATTGTTTACTGAATTTTTATATCTGAGTGTTCAAAATATTTCCAAGCCTGAGTATTGTCTAT  
TGGTATAGATTTTTTAGAAATCAATAATTGATTATTTATTGCACTTATTACAATGCCTGAAAAAGTGCACCACAT  
GGATGTTAAGTAGAAATTCAAGAAAGTAAGATGTCTTCAGCAACTCAGTAAAACCTTACGCCACCTTTTGGTTTG  
TAAAAGGTTTTTTATACATTTCAAACAGGTTGCACAAAAGTTAAAATAATGGGGTCTTTTATAAATCCAAAGTAC  
TGTGAAAACATTTTACATATTTTTTAAATCTTCTGACTAATGCTAAAACGTAATCTAATTAAATTTTATACAGTT  
ACTGCAGTAAGCATTAGGAAGTGAATATGATATACAAAATAGTTTATAAAGACTCTATAGTTCCTATAATTTATT  
TTACTGGCAAATGTCATGCAACAATAATAAATTATTGTAACTTTGAAAAAAAAAAAAAAAAAAAAAAAAAAAAA  
AAAAAA

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**FIGURE 2236**

MGYYTFIFSVSLHSFSGLWVCVCVCVCFTHYVLGTISGTWNVHYCRGTTGN

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**FIGURE 2237**

GGGGAGAGCGGGTGTGTTGAAGGCTCCGCGGACCGGCACTAGGAGCCGGGGCGGGTCCGTGACCCCTCCGGCTGCT  
CGGAGTGAACAGGCGGCCAGGAAAGAAGCGGGCTGAACACCATGATTCCCTTTGGAGAAGCCAGGCAGCGGGCGG  
TCCTCCCCAGGCGCCACCTCAGGCTCGGGCCGGGCGAGGCCGGGGTCTGAGCGGGCCGTGCCGGCCGCCCGCCG  
CCCCAGGCCCGCGGGCTGCTGACAGAGATACGCGCCGTGGTGCGCACCGAGCCCTTCCAGGACGGCTACAGCCTG  
TGCCCGGGCCGGGAGCTGGGCAGGGGAAAATTTGCAGTGGTGAGAAAATGTATAAAGAAAGATTCTGGGAAAGAA  
TTTGCTGCAAAGTTCATGAGAAAAAGAAAAGGCCAAGATTGTCGGATGGAATAATTTCATGAGATTGCTGTA  
CTTGAACTAGCACAGACAATCCTTGGGTCATTAATTTACATGAAGTTTATGAGACTGCATCAGAAATGATCTTA  
GTTCTGGAATATGCTGCTGGGGGTGAAATCTTTGACCAGTGTGTTGCAGACAGAGAAGAAGCCTTTAAAGAAAAA  
GATGTTCAAAGACTTATGCGACAGATTTTAGAAGGTGTTCACTTTTTACACACTCGTGATGTAGTTCATCTTGAT  
TTGAAGCCTCAGAATATTCTGTTGACAAGTGAATCTCCATTGGGTGACATTAAGATTGTTGATTTTGGCCTTTCA  
AGAATATTGAAGAACAGTGAAGAGCTCCGAGAAATTATGGGTACCCCTGAATATGTGGCTCCTGAAATCTTAGT  
TATGATCCTATAAGCATGGCAACAGATATGTGGAGCATTGGAGTGTTAACATATGTCATGCTTACAGGAATATCA  
CCTTTCTTAGGCAATGATAAACAAGAACATTCTTAAACATCTCACAGATGAATTTAAGTTATTCTGAGGAAGAA  
TTTGATGTTTTGTCTGAGTCGGCTGTTGATTTTCATCAGGACACTTTTAGTTAAGAAACCTGAAGATCGAGCCACT  
GCTGAAGAATGTCTAAAGCACCCCTGGTTGACACAGAGCAGTATTCAAGAGCCTTCTTTCAGGATGGAAAAGGCA  
CTAGAAGAAGCAAATGCCCTCCAAGAAGGTCATTCTGTGCCTGAAATTAATTCGGATACCGACAAATCAGAAACC  
GAGGAATCCATTGTAACCGAAGAGTTAATTGTAGTTACTTCATATACTCTAGGACAATGCAGACAGTCTGAAAAA  
GAGAAAATGGAGCAAAGGCCATTTCCAAACGATTTAAATTTGAGGAACCTTTGCTACAAGAAATTCAGGAGAA  
TTTATCTACTGAGCAATATTTCCCTTTAGAACTTCAAGATTCTACACTGAAAATGTTAATATTATTTATGGACC  
TCTGGCCAAATGGTACATGTACTGGAAGTGGATAACCAGTATCACTTACACAAACAAAAATAACTTTGTCAAATT  
TGTGGAGTTAGGTGGAAGCCAGATTTTAAAGTTGCCAACCAGGATATTTAACAGGTACAGTTACCCGTTTCAAT  
GTTATTTTTAAGAAGGGAGATGTTGGCACCTTTGAATTTCTACATCCTGTTTCTCCAGAATGAGAATTTGTGTACA  
AAGATATTTGTATTCACTTTCTTTAAAAAATCCAAGTAAAAGTGCCAAAACCTACATTTCTGTAAATCTCTTGCA  
TATTCATATGTGTATCTATATCTGCATAATGTTTGTTAATGTCTACTAAAATTGCTACTTTTTCACTTTTGGATT  
GTTTTTGGCAAAATTTTAGTCTAAACAGACATCTAAATTTTCGAGACTTAGAATAACATTCATAAGTTTGATA  
ATGTCTTTTTTAAATATTTTCTACTGCTTTATAGTGACTTGATTGGTTTTCTGTTGTGTTTTTGCTAAATACT  
AGTAACATATCAGTGAAAAACCTAATTTTTTTCTCTTCAATGTCAGTAGTAAGAGAGGTGGTAATTTTTCACC  
TCTGAAATATTCTGGGTTTAGGTGTCAGCTTTTGAGCTGCTTCCCTCATCACACCACACTCACATGCATCTGTT  
CTCTCTCACACTCTATACCCCTGCCACTTCCCTGGCACCTCCCCCATGCTTGTCATTTAATTTTGGCCACTTGTA  
GGTATCAGTGTGATCTGATCAACACTCTGGTTACCTTGGTCAGTGAAAAGATGCTACTATATTGCTTTTGTCCCA  
AAGTGAGTAAAATCCCCTAGAGCAGAGAGAGAGAGAGAGAGAGAGTGTCTTCATGCCAACCACAGCCTGTTTCTG  
CTGAGTTTCTTATCAGCCCTCAAGCTATGCTAGGAAAAGTTATAAAATGCCAAAATATTTATAAACATTTACTTT  
GTCCATAAAAAATTTACATTGGATACTCTGTAAGTAGGAGGTACTTTGTCCCAAAAAGATGTATAAGAATGTACT  
AATAGTTTTATTGATTAGGATTGAACAGTTCAGTTGTATCTATGCCCCACAGTGACCAGTAAAGTCCAATTAAA  
ATATGGAAATGTAAAAGTGTATGCCGAATACCTTAAAGTAACTAATTATCCTTACACACAAAAGGCTCAGTGCAT  
TAAATATTTGCCTATC



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**FIGURE 2238**

MIPLEKPGSGGSSPGATSGSGRAGRGLSGPCRPPPPQARGLLTEIRAVVRTEPFQDGYSLCPGRELGRGKFAVV  
RKCICKDSGKEFAAKFMRKRRKGQDCRMEIIHEIAVLELAQDNPWVINLHEVYETASEMILVLEYAAGGEIFDQC  
VADREEAFKEKDVQRLMRQILEGVHFLHTRDVVHLDLKPQNILLTSESPLGDIKIVDFGLSRILKNSEELREIMG  
TPEYVAPEILSYDPISMATDMWSIGVLTIVMLTGISPFLGNDKQETFLNISQMNLSEEEFVDLSESAVDFIRT  
LLVKKPEDRATAEECLKHPWLTQSSIQEPSFRMEKALEEANALQEGHSVPEINSDTKSETEESIVTEELIVVTS  
YTLGQCRQSEKEKMEQKAISKRFKFEELLQEIPGEFIY

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**FIGURE 2239**

CTTTCGCGCGGCGGAAGAGCGCGGCCAGCTTCGGCACACTTGGGAGCCGGATCCCAGCCCTACGCCTCGTCCC  
CTACAAGCTCCTCCAAGCCCCGCGGCTGCTGTGGGAGCGGCGGCGCTCCTCTCCTGGAGGTCGTCTCCTGGCAT  
CCTCGGGGCGCGAGGAAGGAAGAGGAGGCAGCGGCCGGAGCCCTGGTGGGCGGCCTGAGGTGAGAGCCCGACCGG  
CCCCTTTGGGAATATCGCGACCGGTGGCTACCGGACCAGCAGCGGCCCTCGGCGGCAGCACCACAGACTTCCTGGA  
GGAGTGAAGGCGAAACGCGAGAAGATGCGCGCCAAGCAGAACCCCCGGGCCCGGCCCCGGGAGGGGGCAG  
CAGCGACGCGCGTGGGAAGCCCCCGGGGGGCTCTGGGCACCCCGCGGCGCGCGCTGCCAACGAGCTCAACAA  
CAACCTCCCGGGCGCGCGCGCGGCCGACCTGCCGTCCCGGTCCCGGGGGCGTGAAGTGCAGCGGTGGCTCCGC  
CATGCTGACGCGGGCGCCCCCGGCGCGCGCGCGGTGCGAGGACGAGCCCCAGCCGCCTCTGCCTCGGC  
TGCACCGCGCCCCAGCGTGACGAGGAGGAGCCGGACGGCGTCCCAGAGAAGGGCAAGAGCTCGGGCCCCAGTGC  
CAGGAAAGGCAAGGGGCAGATCGAGAAGAGGAAGCTGCGGGAGAAGCGGCGCTCCACCGCGGTGGTCAACATCCC  
TGCCGCAGAGTGCTTAGATGAGTACGAAGATGATGAAGCAGGGCAGAAAGAGCGGAAACGAGAAGATGCAATTAC  
ACAACAGAACTATTTCAGAAATGAAGCTGTAACTTACTAGATCCAGGCAGTTTCTATCTGTACAGGAGCCACC  
TAGAACAGTTTCAGGCAGATATAAAAGCACAACCAAGTGTCTCTGAAGAAGATGTCTCAAGTAGATATTCTGAAC  
AGATAGAAGTGGGTTCCCTAGATATAACAGGGATGCAAAATGTTTCAGGTACTCTGGTTTCAAGTAGCACACTGGA  
AAAGAAAATTGAAGATCTTGAAGGAAGTAGTAACAGAAAGACAAGAAAACCTAAGACTTGTGAGACTGATGCA  
AGATAAAGAGGAAATGATTGGAAGAACTCAAAGAAGAAATGATTTATTAAATAGAGACCTAGATGACATAGAAGA  
TGAAATGAACAGCTAAAGCAGGAAAATAAACTCTTTTGAAGTTGTGGGTGAGCTGACCAGGTAGAGGATTCA  
AGACTCAATGTGGAAAAATATTTTAACTACTGATTGAATGTTAATGGTCAATGCTAGCACAAATATTCTTATGC  
TGCAATACATTAAATAACTAAGCAAGTATATTTATTTCTAGCAAACAGATGTTTGTTCAAAATACCTCTTTT  
TCATTATTGGTTTTAAAAAAGCATTATCCTTTTATCTCACAAATAAGTAATATCTTTCAGTTATTAAATGATAGA  
TAATGCCTTTTTGGTTTTGTGTGGTATTCACTAATACATGGTTTAAAGTCACAGCCGTTTGAATATATTTTATC  
TTGGTAGTACATTTTCTCCCTTAGGAATATACATAGTCTTTGTTTACATGAGTTCCAATATCTTTGGGATGTTAC  
CCTCACATGTCCCTATACTGATGTGTGCCACCTTTTATGTGTTGATGACTCACTCATAAGGTTTTGGTC

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**FIGURE 2240**

MATGGYRTSSGLGGSTTDFLEEWKAKREKMRKQNPFGPAPPGGGSSDAAGKPPAGALGTPAAAAANELNNNLPG  
GAPAAPAVPGPGGVNCAVGSAMLTRAPPARGPRRSEDEPPAASASAAPPPQRDEEEFDGVPEKGKSSGSPSARKGK  
GQIEKRKLREKRRSTGVVNIPAAECLDEYEDDEAGQKERKREDAITQQNTIQNEAVNLLDPGSSYLLQEPPRTVS  
GRYKSTTSVSEEDVSSRYSRTDRSGFPRYNRDANVSGTLVSSSTLEKKIEDLEKEVVIERQENLRLVRLMQDKEE  
MIGKLKEEIDLLNRDLDDIEDENEQLKQENKTLKVVGQLTR

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**FIGURE 2241**

AGGCCGCGCTCGCGCCGAGGGGCTGCGAGAGTGACCGCGGCTGCTCCAGCGCTGACGCCGAGCCATGGCGGACGA  
GGAGCTTGAGGCGCTGAGGAGACAGAGGCTGGCCGAGCTGCAGGCCAAACACGGGGATCCTGGTGATGCGGCCCCA  
ACAGGAAGCAAAGCACAGGAAGCAGAAATGAGAAACAGTATCTTAGCCCAAGTTCTGGATCAGTCGGCCCGGGC  
CAGGTTAAGTAACTTAGCACTTGTAAGCCTGAAAAAACTAAAGCAGTAGAGAATTACCTTATACAGATGGCAAG  
ATATGGACAACCTAAGTGAGAAGGTATCAGAACAAGGTTAATAGAAATCCTTAAAAAAGTAAGCCAACAAACAGA  
AAAGACAACAACAGTGAAATTCAACAGAAGAAAAGTAATGGACTCTGATGAAGATGACGATTATTGAACTACAAG  
TGCTCACAGACTAGAACTTAACGGAACAAGTCTAGGACAGAAGTTAAGATCTGATTATTTACTTTGTTTATTGTC  
TATATGCCTTTTAAAAAAATAAACTTGTTATGCAAAATAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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**FIGURE 2242**

MADEELEALRRQRLAELQAKHGDPGDAAQQEAKHREAEMRNSILAQVLDQSARARLSNLALVKPEKTKAVENYLI  
QMARYGQLSEKVSEQGLIEILKKVSQQTEKTTTVKFNRKVMDSDEDDY

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FIGURE 2243

GCCCCCTCCCTCCGCCCCGCCGCCGCCGCCGCTCAGTCTGGCAGGCAGGCAGGCAATCGGTCCGAGTGGCTGTC  
GGCTCTTCAGCTCTCCCGCTCGGCGTCTTCCTTCCTCCTCCCGGTCAGCGTCGGCGGCTGCACCGGCGGCGGCGC  
AGTCCCTGCGGGAGGGGCGACAAGAGCTGAGCGGCGGCGGCCGAGCGTCGAGCTCAGCGCGGCGAGGCGGCGGCGC  
GGCCCCGCGAGCCAACATGCGGCGGCGGCGGCGGCGGCGGCCGAGATGGTCCGCGGCGAGGTGTTTCGAC  
GTGGGGCCGCGCTACACCAACCTCTCGTACATCGGCGAGGGCGCCTACGGCATGGTGTGCTCTGCTTATGATAAT  
GTCAACAAAGTTCGAGTAGCTATCAAGAAAATCAGCCCCCTTTGAGCACCAGACCTACTGCCAGAGAACCCTGAGG  
GAGATAAAAATCTTACTGCGCTTCAGACATGAGAACATCATTGGAATCAATGACATTATTTCGAGCACCAACCATC  
GAGCAAATGAAAGATGTATATATAGTACAGGACCTCATGGAAACAGATCTTTACAAGCTCTTGAAGACACAACAC  
CTCAGCAATGACCATATCTGCTATTTTCTCTACCAGATCCTCAGAGGGTTAAAATATATCCATTACGTAACGTT  
CTGCACCGTGACCTCAAGCCTTCCAACCTGCTGCTCAACACCACCTGTGATCTCAAGATCTGTGACTTTGGCCTG  
GCCCCGTGTTGCAGATCCAGACCATGATCACACAGGGTTCTTGACAGAATATGTGGCCACACGTTGGTACAGGGCT  
CCAGAAATTATGTTGAATTCCAAGGGCTACACCAAGTCCATTGATATTGGTCTGTAGGCTGCATTCTGGCAGAA  
ATGCTTTCTAACAGGCCCATCTTTCCAGGGAAGCATTATCTTGACCAGCTGAAACACATTTTGGGTATTCTTGGA  
TCCCCATCACAAGAAGACCTGAATTGTATAATAAATTTAAAAGCTAGGAACCTATTTGCTTTCTCTCCACACAAA  
AATAAGGTGCCATGGAACAGGCTGTTCCCAAATGCTGACTCCAAAGCTCTGGACTTATTGGACAAAATGTTGACA  
TTCAACCCACACAAGAGGATTGAAGTAGAACAGGCTCTGCCCCACCCATATCTGGAGCAGTATTACGACCCGAGT  
GACGAGCCCATCGCCGAAGCACCATTCAAGTTCGACATGGAATTGGATGACTTGCCTAAGGAAAAGCTCAAAGAA  
CTAATTTTGAAGAGACTGCTAGATTCCAGCCAGGATACAGATCTTAAATTTGTGAGACAAGGGCTCAGAGGAC  
TGGACGTGCTCAGACATCGGTGTTCTTCTCCAGTTCTTGACCCCTGGTCTGTCTCCAGCCCGTCTTGCCCTTA  
TCCACTTTGACTCCTTTGAGCCGTTTGGAGGGGCGGTTCTGGTAGTTGTGGCTTTTATGCTTTCAAAGAATTTCT  
TTCAGTCCAGAGAATTCCTCCTGGCAGCCCTGTGTGTGTACCCATTGGTGACCTGCGGCGAGTATGTACTTCAGT  
GCACCTTACTGCTTACTGTTGCTTTAGTCACTAATTGCTTTCTGGTTTGAAGATGCAGTGGTTTCTCCCTCTCC  
TGAATCCTTTTCTACATGATGCCCTGTGACCATGCAGCCGACCAGAGAGAGATTCTTCCCCAATTGGCTCTAG  
TCACTGGCATCTCACTTTTATGATAGGGAAGGCTACTACCTAGGGCACTTTAAGTCAGTGACAGCCCCCTTATTGTC  
ACTTCACCTTTTGACCATAACTGTTTCCCCAGAGCAGGAGCTTGTGGAATAACCTTGGCTGATGTTGCAGCCTGC  
AGCAAGTGCTTCCGTCTCCGAATCCTTGGGGAGCATTGTCCACGCTTTTCTCATATCATGGTAGTCACTAAC  
ATATATAAGGTAIGTGCTATTGGCCCAGCTTTTAGAAAATGCAGTCATTTTCTAAATAAAAAGGAAGTACTGCA  
CCCAGCAGTGTCACTCTGTAGTTACTGTGGTCACTTGTACCATATAGAGGTGTAACACTTGTCAAGAAGCGTTAT  
GTGCAGTACTTAATGTTTGTAAAGACTTACAAAAAAGATTTAAAGTGGCAGCTTCACTCGACATTTGGTGAGAGA  
AGTACAAAGGTTGCAGTGCTGAGCTGTGGGCGGTTTCTGGGGATGTCCCAGGGTGGAATCCACATGCTGGTGCA  
TATACGCCCTTGAGCTACTTCAAATGTGGTTTATACCTCGCAGATACAAGAATCTTTATGAATATACAATTCTTT  
TTCTTCTACAGCTTAGCTCCGTCTTTTCAACCACGAACATTTAAAACCCGACCTACTAGCACTGTTCTGTCTC  
AAGTACTCAAATATTTCTGATACTGCTGAGTCAGACTGTGAGAAAAGCTAGCACTAACTCGTGTTTGGAGCTCT  
ATCCATATTTTACTGATCTCTTAAAGTATTTGTTCTGCCACTGTGTACTGTGGAGTTGACTCGGTGTTCTGTCC  
CAGTGGGTGCTCCTCTTGACTTCCCACTGCTCTGTGGTGAGAAATTTGCCTTGTTCATAATTACTGTAC  
CCTCGCATGACTGTTACAGCTTTCTGTGCAGAGATGACTGTCCAAGTGCCACATGCCTACGATTGAAATGAAAAC  
TCTATTGTTACCTCTGAGTTGTGTTCCACGGAAAATGCTATCCAGCAGATCATTTAGGAAAAATAATTCTATTTT  
TAGCTTTTCAATTTCTCAGCTGTCTTTTTTCTGTTTGAATTTTGTACAGCAATGGAGAATGGGTATATATAAGAC  
TGCTGCTAATATGAACAGAAATGCATTTGTAATTCATGAAAAATAATGTACATCTTCTATCTTCAAAAAAAA  
AAAAAAA

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**FIGURE 2244**

MAAAAAAGAGPEMVRGQVFDVGPRYTNSYIGEGAYGMVCSAYDNVNKVRVAIKKISPFHQTYCQRTLREIKIL  
LRFRHENIIGINDIIRAPTIEQMKDVYIVQDLMETDLYKLLKTQHLSNDHICYFLYQILRGLKYIHSANVLHRDL  
KPSNLLLNTTCDLKICDFGLARVADPDHDHTGFLT EYVATR WYRAPEIMLNSKGYTKSIDIWSVGCILAEMLSNR  
PIFPGKHYLDQLNHILGILGSPSQEDLNCIINLKARNYLLSLPHKNKVPWNRLFPNADSKALDLLDKMLTFNPHK  
RIEVEQALAHPLYEQYYDP SDEPIAEAPFKFDMELDDLPKEKLKELIFEETARFQPGYRS

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**FIGURE 2245A**

GCGCACTGGAGCCCTGGCCAGCGCGCAGCCTTCCCGGCGCCGGCGGGCTGGGTCTTGGGAATTCTGGTTTGCTTT  
GGCTCACTCGCTTTTTTACAAACCACTGGATCTTACATGCCTCTGTACCGCCCACTTCCACTCCATGTCCCCATGC  
TCCTGCGCCAGCAACAGGACATGTTCTCTGGATGTCAGCTGAGTCATTAAAGTAACTCTGCATGTCAGTAGACAG  
ACCTTGGTAGAACCAAGGCTCCCAGAGACACCCATCTCTCCTCATTTTTTTGGTGTGTGTGTCTTCACCGAAC  
ATTCAAAACTGTTTCTCCAAAGCGTTTTGCAAAAACCTCAGACTGTTTTCCAAAGCAGAAGCACTGGAGTCCCCAG  
CAGAAGCGATGGGCAGTGTGCGAACCAACCGCTACAGCATCGTCTCTTCAGAAGAAGACGGTATGAAGTTGGCCA  
CCATGGCAGTTGCAAATGGCTTTGGGAACGGGAAGAGTAAAGTCCACACCCGACAACAGTGCAGGAGCCGCTTTG  
TGAAGAAAGATGGCCACTGTAATGTTTCAGTTTCATCAATGTGGGTGAGAAGGGGCAACGGTACCTCGCAGACATCT  
TCACCACGTGTGTGGACATTTCGCTGGCGGTGGATGCTGGTTATCTTCTGCCTGGCTTTCGTCTGTATGGCTGT  
TTTTTGGCTGTGTGTGTGTGTGATAGCTCTGCTCCATGGGGACCTGGATGCATCCAAAGAGGGCAAAGCTTGTG  
TGTCGAGGTCAACAGCTTCACGGCTGCCTTCCTCTCTCCATTGAGACCCAGACAACCATAGGCTATGGTTTCA  
GATGTGTACGGATGAATGCCAATTGCTGTTTTTCATGGTGGTGTTCAGTCAATCGTGGGCTGCATCATCGATG  
CTTTCATCATTGGCGCAGTCATGGCCAAGATGGCAAAGCCAAAGAGAAACGAGACTCTTGTCTTCAGTCACA  
ATGCCGTGATTGCCATGAGAGACGGCAAGCTGTGTTTGTATGTGGCGAGTGGGCAATCTCGGAAAAGCCACTTGG  
TGGAAGCTCATGTTGAGCACAGCTCCTCAAATCCAGAATTACTTCTGAAGGGGAGTATATCCCTCTGGATCAAA  
TAGACATCAATGTTGGGTTTGACAGTGAATCGATCGTATATTTCTGGTGTCCCCAATCACTATAGTCCATGAAA  
TAGATGAAGACAGTCTTTATATGATTTGAGTAAACAGGACATTGACAACGCAGACTTTGAAATCGTGGTCATAC  
TGGAAGGCATGGTGGAAAGCCACTGCCATGACGACACAGTGCCTGAGTCTTATCTAGCAATGAAATCCTGTGGG  
GCCACCGCTATGAGCCTGTGCTCTTTGAAGAGAAGCACTACTACAAAGTGGACTATTCCAGGTTCCACAAAACCTT  
ACGAAGTCCCCAACACTCCCTTTGTAGTGCCAGAGACTTAGCAGAAAAGAAATATATCCTCTCAAATGCAAATT  
CATTTTTGCTATGAAATGAAGTTGCCCTCACAAGCAAAGAGGAAGACGACAGTGAATGGAGTTCCAGAAAAGCA  
CTAGTACGGACACGCCCTTGACATAGACCTTCACAACCAGGCAAGTGTACCTCTAGAGCCAGGCCCTTACGGC  
GAGAGTCGGAGATATGACTGACTGATTCTTCTCTGGAATAGTTACTTTACAACACGGTCTGTTGGTCAGAGGCC  
CAAAACAGTTATACAGATGACGGTACTGGTCAAGATGGGTCAAGCAAGCGGCCACAAGGGACTGAGGCAAGCACA  
ATGGTTTTCAAAGAAAGACTGTAAGCTCCATGATTAGCATAAAGCACTAACCATGTCTCCATGTGACCCGATGGCA  
CATAGATGTTGTAGAATAAGTTATGGGTTTTATGTTTTGTGTTTTTCCAAAACCTGAACTTGCAGGCA  
GCCTTGGTTGGGTATTTGATTTATCCAGAATGCTTCTCTTAGGGAACAAGGATGTTTTTAATGGCATAACAAAG  
GCAAGACTCTGCCTTAATTTTTGAAAAGCTGCTAACTACATGAACACAATGTGTATTTTTTGTGTCAGTGTAGTT  
TTCCTTTTGTGTAATTTTAAAGTCAGTGTGAAATTTTATTGAAAGCTCATGATGCGCTTCAAAGTGGCAAGTATT  
TGGCTATTAAGTGCAAAACAAGAGCCTGATTTTTTGGAGCCAGTAATTCGTTTGCTAGAAATGATTTTTTTCT  
CTCTCTCTTTGTTACATAAGGGCATTATGTAACACTAGCCGAATGGTAGCCTCTGGGTGTGTTTTTTCTTTT  
CCTCCATGATGTTAATGGGTTATCTCAAATTTAAGTTAACTACCTAAATAAATACCAAGATAATGCATATT  
TTTGACAGTGGAGCTTACACTTAAAGAAAAACAAGCCCCATGGGCTGCCTTGAATCAAGAGACAATAACTTT  
GAACCTCAGCAAGACCTTGAACCGCCGGTTTCAATTTGCACCTTATTCAGAAAATAGAGCATCATACTACCGAGT  
CTAGTCAGTGTAGTGCTTTTTAAAAATTTTGCCTTTCAITGTAACCTTTTTTATTTTAAAGAGGAAGAAGAAGG  
GGCACACACACAATAACCGACGTCTATCCTTTCTGCTAGGCAGTGTGCGCAGGCTCATGTGTAGTGTGCGAG  
ATGGTGATGTACTCTTATATTTTTCTGGGCTTTCTTTTGCACATTCCAAAATTCATTTTATAAGACAAGATCT  
TCATAGGACCTCCTTGGCATCCTGGCATTCTCAAAACTGAGCCATCCAGCATGAAAGATAAATGGGTTTAAACCC  
TTGCTGCTGAATTTATTGCCTGGACTGTCAGGACATCACCAGCCCACCTTACCTTAGGGAAGATGCCACACCTG  
GCCTCCACACTTGCTCTTCTGATCAGTCTGTCTGGATTGAGTCTTACAGTGTGATAGGGCGGCAATGCCAAA  
GCAGGGAAACAGGGAGGTGTGGACAAGCCAGTTTGTATGCAGCACTTCAGATCAAGTGCTTAGGAAGGAGAGGAAA  
CTTGCCTTTTTTATGGCAGAGGATAGTAATGAAAATGTCTCAGTATTTTAGGGTCAATGAGAGCCATAAAAAATAT  
AACATAATCACAAGTAAAGGAGATAATGGTCTAAAACAGCTATTTCCCTTTTCTGTGTGCATACTTATGACTGAA  
TGTGAGCTAAGCATTTTCTCCTGTGGAGCCCTAGAGCAGGTTACTAAGGAAGGACACATTGTTTTCCAGAAGCCT  
CCCCTGCTGGCTGACTGCCTTGCTAGAAACATAATTTTTTTTTTCTCACTGAAGCTCAATAATGGAACCTTTTT  
TTTTTTTTTTTTTAATTTAAAGTTCCCTATTTGTGAATTTCTGGGATTACTGACTTTTCTTTTTTAAATGGAGTCTC  
AAAATCAACTCTCTTATGGTATTATATCTCTGTATGCCATTAAGGAAGCAGCTTGTCTAGAATCATGTATTTGT  
AAACTGATGTTTGTATGGTCTCTGGTTCTTGAACAGCCATATCTGAATGCCGTGCCTGCAAAACTATGACAATT



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**FIGURE 2245B**

TTTGCTGTTTTTCAGCCTTCAGATTTGATGGCTTGGGAACTGAGGTGTTATTTTCAATGAAACAAAGAAAGAGAT  
GTTAAGCAAGTGGTTGTTTTAGATCCAAATGTAAAGGCAGGTTTGGGAAGGTGTTTAAAGAGTTGGAGGAATTGG  
GGATTGAGTTGTAAAGAAAACCTTACAGAAGAGGCAACAATTTGGTTCTTGACAGTGAGAGGATATTGAGGGCTTC  
AGCTGCTGCTATTATGATGTTTTGCAAAGGAAAATAATCAAACCAAAGAGTATTCAGTGATATGTAAATTAAATG  
AAGATACAGTGGAGAATGGGGGTGACCACAAAAGAGGCTCCCCCTAAACACACAGTGTGCCACTTAAAAAGACT  
TGAGAAATTTGAAAGGGGGTGGGTATGGGGGGGCAAGAAAGAGGGAGGGAAATCTTCAACTTATTTCTGAAAA  
AGAGAAAAAATATAAAATTTCTGGTGCACAGGTTTGTTTTTTCAAGAAAATTTGCAGAAGCTATGTTTTTAA  
GTGTACATTTTATAAAGTTTATCAGATATTTTCATATTTAAAGCCAAATGTAAATAGAGGTCTGTAAAGAAAAAT  
AATTGCCATAGAAAGTATAATTTAGTGCAGTAATTTCTGAGAGCTAGTACCTATATGCTACCGGTTAGCATGGT  
TTTAGCAAATATATACCAGCCTTATAAGGTTTCGTATTGCTATGTTCTTCTGTTATTTATTTTCAGCATGGACTGTT  
CATTTGAAACCTTTTTCTAGTTATTAGCGTTTTAACAGTTACAAGCTTTAAATGGCAATTTTTTTTTTTTTTTT  
TTTTTTTTTTTTTTTTTGTCAAGAGCCAAGACACAGGTAATGCACGACATTGATTGCTGCATTTTACCTTCAAAA  
TATTTGTCCTTATTGACTGGGTCTCCTTAATTAATGTACACATGTCATTAGAATGCAGACGGAGGGGACTCACCA  
TGAATATCTGGGGTTGATTCCAGATGTGTGTTGCTTCTCTATTGCAAGCAGATTCCCTGTTGGATTTACTTCGG  
ATTTATTCCCTTTTAAAGAATTTTTGCCCATATCTGGAAGGGCACTATATTTTGGGAGGAGCCATAGATTCCCTG  
GTTATCCTATTTTTTAAACAAAATGTAGACAAAGTGAACCTCTATTTTGATTATTGAGAAAGGAGTAGTTTTCTATC  
CCTCTAAGAGTATACTTGAATCAGACATTTTAAGGATGTCACTATGGCACTGTTGTCATTTCCAAATTCCTAGAA  
AAGTTTGTTTTACTTTGTTTTTATTCTGTTAATGCATTCTTCTTCTTTACTTCCTTTCTTACCAGTACACTC  
CTATCTCAACTCTGTTTATTGATGAGTTCTGTCCCGTAAATCATATTTCCCTTACAATTAATAAATGTCACCTTC  
ATATTTTATAATAAACCCTCAGTAAAAGCAAAGCTTGTCTGAGAAGTAGAGTGAGTTCTTTTTCACTCTGTG  
TCTAATAATGTTAAGGTGGGAAAAAAAAAAGTGTGGCATAGCTACCTGCCCATCCCCAACCCCTCAGCAAAGTAGA  
ATCTCTTTTCTGGTAATTTTGGGTTTCCGCTCTGGGCTCTGGCAAGTTGAACAATCCTAGCCATTGACAATCGTG  
ATAGTTATTATTTTCCCATTTGCTGTCTTTTGTATCTAAAGTCTTCTTATTGTACTGCACAAACCATGGATTGT  
ACATATTTTATATATTATGTCTTATTTTATTATTTCTAAATAAAAAAATTAAAAATTGAAAAAAAAAAAAA

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**FIGURE 2246**

MGSVRTNRYISIVSSEEDGMKLATMAVANGFGNGKSKVHTRQQCRSREFVKKDGHCVQFINVGEKGQRYLADIFTT  
CVDIRWRWMLVIFCLAFVLSWLFFGCVFWLIALHGDLDASKEGKACVSEVNSFTAFLFSIETQTTIGYGFRVC  
TDECP IAVFMVVFQSI VGCII DAFIIGAVMAKMAKPKKRNETLVFSHNAVIA MRDGLCLMWRVGNLRKSHLVEA  
HVRAQLLSRITSEGEYIPLDQIDINVGFDSGIDRIFLVSPITIVHEIDEDSPLYDLSKQDIDNADFEIVVILEG  
MVEATAMTTQCRSSYLANEILWGHRYEPVLFEEKHYKVDYSRFHKTYEVPNTPLCSARDLAEKKYILSNANSFC  
YENEVALTSKEEDDSENGVPESTSTDTPPDIDLHNQASVPLEPRPLRRESEI

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**FIGURE 2247**

AGATTGTTCTGGCAAGGAACAGCCAGTGGGAGGTTCCAGCTGAGCGCTCCCCAGAGGTGAGCTGATCCCCAGCCA  
CAGCACACAGGACCAGGCTGCGAGAAACAGCATCATCAGCATCATGCTATTACAATCCCAAACCATGGGGGTTTCT  
CACAGCTTTACACCAAAGGGCATCACTATCCCTCAAAGAGAGAAACCTGGACACATGTACCAAAACGAAGATTAC  
CTGCAGAACGGGCTGCCAACAGAAACCACCGTTCTTGGGACTGTCCAGATCCTGTGTGCTGTGATTTCAGT  
CTGGGGGCCATCTTGGTTTTTGTCTCCCTACCCCTCCCACTTCAATCCAGCAATTTCCACCACTTTGATGTCTGGG  
TACCCATTTTTAGGAGCTCTGTGTTTTGGCATTACTGGATCCCTCTCAATTATCTCTGGAACAACTCAACTAAG  
CCCTTTGACCTGAGCAGCTTGACCTCAAATGCAGTGAGTTCTGTACTGCAGGAGCAGGCCTCTTCTCTTGTCT  
GACAGCATGGTAGCCCTGAGGACTGCCTCTCAACATTGTGGCTCAGAAATGGATTATCTATCTCATTGCCTTAT  
TCGGAGTACTATTATCCAATATATGAAATCAAAGATTGTCTCCTGACCAGTGTCAAGTTAACAGGTGTCTAGTG  
GTGATGCTCATCTTCACTGTGCTGGAGCTCTTATTAGCTGCATACAGTTCTGTCTTTTGGTGGAACAGCTCTAC  
TCCAACAACCTGGGAGTTCATTTTCTCGACCCAGTCACAAGATCATATCCAACAGGTCAAAAAGAGTTCTTCA  
CGGTCTTGGATATAAGTAACTCTTGGCCTCAGAGGAAGGAAAAGCAACTCAACACTCATGGTCAAGTGTGATTAG  
ACTTTCCTGAAATCTCTGCCATTTTAGATACTGTGAAACAACTAAAAAAAAAAAGCTTTGTTTTGTATTGT  
TTACTATGAGTCGTTATTTAATTTCTTGAATAAATTTCTCAAAGCCCAAGTCAATAAATGTTATCAGCCAG  
TCTTCCAAAATGGTCATAAACTTTATAAACTGCTTTGGGTAACTGAGCAGAAGGTGATACACAGAAGGGAAAAT  
GTGCACTCATGCTAGTGTGAATTTGGTAAGTCGCGTACTCTGCAGGCTGTTTCTGTATTATTTTCACACTCATA  
TTGCTTAAATATTACATATTAGGGATTG

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**FIGURE 2248**

MLLSQTMGVSHSFTPKGITIPQREKPGHMYQNEDYLQNGLPTETTVLGTVQILCCLLISSLGAILVFAPYPSHF  
NPAISTTLMSGYPFLGALCFGITGSLSIISGKQSTKPFDLSSLTSNAVSSVTAGAGLFLADSMVALRTASQHCG  
SEMDYLSSLPYSEYYYPIYEIKDCLLTSVSLTGVLVVMLIFTVLELLLAAYSSVFWWKQLYSNNPGSSFSSSTQSQ  
DHIQQVKKSSSRSWI

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**FIGURE 2249A**

TTCAAGTATGGCAGACAAAGGATGTTCTGCGTGGGGAAATGTGGTGACACCCATTTCACAAGGACAGCTCACATA  
GATTGAGTGTCTCAGGAAGGACCAGCACCATAACCCAGTGCCTGATGTGTATCATCTCAATTAGTCCTTGCCCTCAGA  
TGCAAAAGGAAACCATCGCCATCATCATCACCACCATCATCATCTTCTCCTGTGCAGATGGAAAGGCTGAGGCA  
TAGAGAGGTGACGGAGTCTGCCCAGGACTGCAAGCCTGCTGGTGGCAGAGCCAGGTTCGAATGGAATGAAGGCTG  
TCATCCTCAGATGGCAGGGTAGGCAGGTGGCTAGAGCTCACTTGGGAGAAGGGGAAAGGACACTGACTTTGGCTA  
GGGATGGAGCAGAGCTTGGGCTGGCTTTCCATGCACGGGCAGGGGGCGTGGCTCATGGCTACGCTCCAGCCCCGG  
GTGTGGACATTGAATCTTCCAGGTCTACCCTAGGCTATGGGTCTGGACAGCACTGTGATGGAAAGAAGACACTCT  
ATGTCTGCATTCTGTGACCAATGATGTGACTGTGGGAATGGCGCTGGCATCTGGCTGCCACTCTGGGACGGGTG  
GCCAGCTGCCATCAGGCCCCACCCAGGATGGGACCACCATGCGACTTCTTCCCTCGCTCCTCTGGTCATGTCCA  
GAGCCCCAGGAGGACCAGCAAAGCCTCTCGAGCCGATGGCAGCTCACGTTCTGCCTGTGAGCTACTCCTCTCCT  
GGGCAATATTGGTGCTTGTGTGGCTCTCCCCGGGGTATGTGACTGCCTCTGTGCTGGGCACCTGGCCTGGGCT  
TTCTTCTGGGCTGGGCAGCTGGGCTCAGCTTGGACCCAGGCAGCAGCCACAGAGGGGCCCCATGGAGGTGACAG  
AGTTGCTTCTATGATGGTGAACGGGCAGCTGTGACACGGAGGAGGCGACCACTCCTCAGTTTCCAAGTGCTGCGG  
TCAGGGCCGGGGCCAGCAAAGTCCCTCCCATATTCAAAGAGCGGGTTGGGTTTGTCCAGGAGGACATAGTCAG  
GAGCCCATGCTGGGACATGCCTCCTCAAAGTTACGCTGGATCCCCAGCCTCTGCCAACGGCCCCGCTCCTTAG  
CTAACCCAGCTTGTCTCTGGGTTCCACGGCGGAGTCAGATGTTTCTGGGCAGTTTCACTTTGTGCCTTAAATGC  
ATGTTGAGGACTTTAAGGAATTGTGGAGAAATAGGGCTGTGGCAAAGGCAAGTGACAACCTGGGAACATGATCCC  
GCAGAGGCTGCTGAGGCTGGGCCCCAGGGGCGTGGGTTTCATCCTTCTGCCTGGGCTTGGTGGGAGGGGCGAGAC  
TCTGTGGTCTGAGACACAAAAAACCACAAACATATGTGTGTACAGACACACAGCAGAGCCACACACACACTTGT  
GCCCCATGCACACACTCACAGGAGGCCCCGTGGACTCCGCACAGGGAAGAACTCCTCCGGTCGACAGTGGACGGCG  
CTGCAGCAGGGACTCACCCCCAAGCCCTGCCTGCCTCCCATTTGCCACCTGGCCCTGGCTTGAAGGCTTATCTC  
ATGCTGTGGCCGGGGACCTCTTGTCTTCTGCAACCCCTTGTCTGGACTGGGGCCTGGGCTCTCCTGGGCTGTGCC  
TAGGGTTTGTAAACCAGGGCCTGTGCCGGCGTGCACAGAGCATCTCTCCTGGGAGGCTCAGGGCTGCCTCCTCG  
AGCTCTGTGGGCCTGCACTGGCCGGTGAGCTTGTGGTGTGGGTTTTTCAGGCTGTATCCTTCTACCTCCTGAGCCC  
AGGGGTCCAGGCGCCCTGCAGCTGTCTCCTCGGCCATCCTGTGGGGCCCCGAGGCTTGGCCCTCACTTCAGTGC  
CTGGGTGCTCAGGCTTTGCCCAGGTGCCAGGAGAAGGTGTGAGCATGAGCCTATTGGACACACCTGGCGACGTAT  
ACCAGGTGTCCACCCCTGCCACCATGGGGCTCCCGATACGGCAACCACACGACCTGTGGGGACCAATGAGG  
AAAGAGAGAGGCAGGTCTGGGCCAGGCTCACAGGGACTCCGGCATAGCAGACCCTGCCCCAGCAGGCCCCCTTGT  
CCTTCTGGGTCTTGTCTTCTATGAGGAAGTACCCATCCCTGGTGGGGCTCCACCCCGCTTCTCAGTGGGCT  
CTATGCTTGCCCTCGTCGGAGTCACCCCTCAGGCAGTCTGGGATCCTCTCCTTTAGACCCACTGTGCCTTCCCG  
CCTCCCGGCTTCTGCTGGGGGCAGAAAGAAATGCCTCCCCAGGTCTGTCTCTGGAGGCTCTGAGGGAGATGGGCT  
TGGGGGCTGTAGGAGGAGGCAGGGATTCCAGGGTGTGAGGAAGGCAGGGGTGCCAGGTCCACCTAGTGAAGTAA  
TAAACCGTGGGTGGTGATAGTGACCCAGTGCCCTCACTGCCAGCCCCGCTGTCTCAGCCAGCACTGCAGGGA  
TCCAGGCCCAGACTCTGGAGGCCTTCACTGATCCAGCCACCCAGAAAAGCTGCAGCCTGCAGGCACCAGCCG  
GGCCATATGCCCAGTGCCAGCTAGGGCCCCACCGCCATCCTGCACACGGGGCCGCTGGGCAGGTGCCCTCACAC  
CCCCAGGATGTGAGTGCTCACCTCGAGCAAAGCGCCCCAGCTCGGCCTTGGGAGGTGGTCATGTCCAGGGGATG  
ATGGAGAGCTGTCCAACCAAGAGAGCGGGAGGGAGGGAAGGAGGGAGGAGAGATAGAGAGAGAGAGAGAGAG  
AGAGGAAGTGTGGGGCCCTAAGGCTGCCTTAGTGGAGGTGCGCGTGGCCTGCACCTCACCAAGCCTAGCCACTCTC  
GCGGCTCTGAGTGGCTCACAGGCTTGTGAGGGCCCCGTGCTGCCTGCTGGGTCCCCACAGGGCTCCCTCTAGG  
AATGCGCCATGGCTGCTATGACAATTTGCACAGCCCAGTGGCTTAAACACCATTTATACCACAGGTCCAGATGAA  
TCTTGCAGGGCCAAGGTCTGGGGGTGCTGGAGGCCATGCTCCCTCCAGGCTTGGGGGAGAACTTCCCTGCCTCC  
TCCAGTCTCTCCATCCCTGAGCTCTCGGCTCCTCCTCGCTTTCAGGGCCAGGGCGTAGCGTCTGCTCTCTCGGC  
CTCTGCCTCCGCTTCCACCTCACCTGGCTTCTGTCTATGTGAGTCTCCCTCTGCCAACCTCTAGAAGGCACT  
TGTGATTACATTAGGGCTCACCCCTTTAATCCAGGGGAGCCTCTCCACTTCATGATTTTCAGCTAACTTGCTTCT  
GCACAGACCCCTTTCCCTATAAGGGCACACATTCAGTGGTCCCGGGGCTAAGGACCTTGCTCCAAGTCCCTCCA  
CCCATGATGCTGTGCCTTCCAGAAACCTGTCTCTGCAGCTCGGTCTTGACCCCAAGCCTGCTGGTGACCTGAAC  
TTCACAGGGTTATCCCTTGGACTGTGTGCAGCAGATGCAATTTCTGGGCTGAATGTGCTCCTGGGGCA  
GGACCTTGAGCTGCAGCACACACTAGGCCACCTGCAGTCTCACAGGCCATGCCCTGGGTAGACAGGGAGGTGCT

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**FIGURE 2249B**

CAACCCAGCTCGGGTCTCTAGTCTGCCTGGCTACCATGCTTCTACTCTCCTGCATCTGCAGACCCCTGCGTTG  
CCATGTGAGGCAGGGGTGGGGTGGGGCTGAGGGCGTGGCTTTGGTCCCTGGCTGTCCGGATGAAGTACCAGAGTG  
ACGCCACAGCCCCATCCCGGTGACATGCTCACCCCCAACCCCGTGTCCGGGACCCCGGTCTTGTGTGGTCCCTGA  
TGTGGAGTCTCTAGTCTTAAGATACATCCAGAAAGTCTTGCCCATGAATTGGAGGTGCAGAGTCTGCAGAGCC  
TCTGGGCTGGGCTGGTGCCCCAGGAGATGGAGGGCTGGTGGATGCCCTCCTCCCTCAGAGCTGGGGCAGCTGC  
CTCCCAGGGGTGGGACTCTGGGCTCAGAGAGAGGCCCTTGAGCTGCAGCTCAGGGGGATGCGAGGCTTCGTGGAC  
TGTGTCTTGGTCCATGTGGTGCACGTGTCTCCACCTCCAAGGAGAGGCTCCTCAGTGTGCACCTCCCCACATCC  
GTCTCTCTGCCGGCCCCGGCGTCTGAGCAGTCATTCCATGCCAGCACCTCTGCAGCCTGCTGGGCCCTCAGGTT  
CTCTGTGAGGGACCTCCCCGGCCTTCGGCGGAGGTGGAGTAAGCTCCGTCAAGGCAGGTGGCTTCGTCCCTTCCT  
GTGAGTGACACCAGTGATGAAATGGACCCCTCCACACAGGCATCCTCAGGGCACAGGGCCCTGGGGGCACCTTCC  
TCCTTTTCGTATTTGTGAGAAAAAAGTGGCATTGCGCTCACACCAGGATGCTGGAGCAGAGCTGACATGCTCGG  
GAAAGGGCAGAGGTCACTGGGGGTGGGAAGGTCACTCAGTCCAGACTCAGCACCTCGTGGGCTGGTAAACTGAGG  
CTCAAAGTGCTGGTGCCAGGCCTGAGGCCTCGCGGTGACCCCTCTCTCTGGTTCCAGCACCTGCCTGAGACCTG  
CCCCAGGCACCCATAACCTGGAATTCCTGTTTCTTGTCCAGGGCCTGAGGAAATGGCTCCCCAGGTCTGTCTC  
TGGATGCTCTGAGGCAGATGGGCTTGGGGGCTCTAGGAGGAGGCAGGGACTCCAGGGTGTGAGGAAGGCAGGGGT  
GCCGGGTCCACCCAGTGGAGTAACAACTGTGGGTGGCGTTTGGGCTCCCCGCCTTCCCACTGGGTGTGCTG  
GTGCTGGCGCTGCTGGGTGAGGGCTGCCCGTGACCCAGACACCACTGTCCATCCTGTGAGGCTCCCGTCTGGGC  
ATGTCTGGGTGGATTCTCTTTCTGTAAAGTAGCTACATGAGGCAGGGGCTCCTGGATCCAAAGCAAATGACA  
GGAATTCAGAGCCAGGTGCATCCACTCAGGGCAGCCAGTGTGGTGGAGCTGCCTTAGCACATGGAGGAGAGT  
GAAAGTCAGCCTGCCCTCTCACGAGAAAAGAACCTGGGGATACCTCTCAGCCTCCAGCGTTGCAAGTGCAAGGC  
CAGTGGAGTTAATCTGCAACGTGCACGAGGGCGTGTGTGAGTGGCTGTGTGCAGGAGTGTGAGTGAGCAAGAGCA  
AGAGCGCATGGCTCCTGCTGTACCTCAAGGTGTGGGCTCCTGGTGGCTGCTCAGTGTTCACAGGGGTGAGAGGCC  
TCATGTATCCTAGGCTGCCTGAGATTTCTGTGTGCTGATCGCATCCTCAGTTTCTTGTCCACCGCTTCACTGGCA  
AGAGTCCCAGGCTCCAAGGACACCCCTCCCTGCACATGATTGGGTGTTAATGGTGGCCTGGGTTGTGTCTTCCCT  
GGGGATGAGGGTTGGGTGTCCATGGTGCCTGGGCTGTGTCTCCCTAGGGATGAGGGTGGGGCTCCACGATG  
CCCTGGGCTGTGTGCTTATGGAATGAGGGTTGGGTGTCCAAGATGCCCTGGGCTGTGTCTTCCCTGGGGAT  
GAGGGTTGGATGTCCAAGATGCCCTGGGCTGTGTACTCCCTAGGAATGAGGGCTGGGTGTCCAAGATACCCTGG  
GCTGTGTCTTCCCTGGGGATGAGGGTTGGGTGTCCATGGTGCCCTGGGCTGTGTCTTCCCTGGGGATGACGGT  
TGGGTGTCCATGGTGCCCTGGGCTGTGTTTCTTGGGGATGAGGGTTGGGTGTGCTATGGCATCCTGGGCAGGTGCT  
TCCTTTCTGCACAAGGGTTGGGTGACCATGATGTCTTGCCAATGGCTTCCCTGGGTTGCCTCTTTTCTGCCATGT  
GGGAAGAGCAGGGGAGGTTTAGTTGGTCTCAGCACATCATTCTCTCAGGATAAGTAGAAGAGTGTCTGAGCTGTG  
AGGCCAGTGTCCAGCTTTGGAATTGTCTTCCCCACCCCTCACCTCCATCCCATCAAAGCCCGACATGTCTGTGG  
CAGCAGCGAGGTGGGTGTTGGCTGTTCTCTTGGGCTGGGGGTAGTCGTGGACGGGGAAAGGAGAGATGCTGGTC  
AAAGGGCATGAAGTTTCTGCTGATGGGAGGAGTCAGTTCTTTTGATCTGTTGCACAGCATGGTGACTATAGTTAA  
CAATAATGACTATTTCAAATTTGCTAAAAGATGAGATTTTAAATGTTCTCACCACAAAATGATAAGTGTGTGAGG  
TGATGGATATGCCACTTACCTTGTTTTAATCATCCACAATATAGACAGGCATTGTCACTTGTGATTGTACCCCA  
GGAATCTTCACATTTGCTTTTTTGTCAATTAATAATAGAGACACAAAAGGAGAGAGGGGAGAGCAATAGACTCTT  
CACGGAACCGTGGGCTTCTGCCTCCGGGTAAAATAAACTGCAAAAAGGATTCCCAGGAAACCGTTCCTCTTTCA  
GCCCTTGGTTACAGGAAGCCGGATTTGGGAAATCTGCCTGGATGACATTCACATGAACGGGCACATACAGGAAA  
CACGGTAATGTAATTAGAATAGTCAGAGAAAAGTAGCCAGAAATGACATTCACATGAACGGGCACATACAGGAGA  
AAACACGGTAACGTAATTAGAATAGTCAGAGAAAAGTAGCCAGAAATGACATTCACATGAACGGGCACATACAGG  
AGAAACCATGGTAACGTAATTAGAATAGTCAGAGAAAAGTAGCCAGAAATGACATTCACATGAACGGGCACATAC  
AGGAAAACACGGTAATGTAATTAGAATAGTCAGAGAAAAGTAGCCAGAAATGACATTCACATGAACGGGCACATA  
CAGGAGAAAACACGGTAACGTAATTAGAATAGTCAGAGAAAAGTAGCCAGAAATGACATTCACATGAACGGGCAC  
ATACAGGAGAAAACACGGTAACGTAATTAGAATAGTCAGAGAAAAGTAGCCAGAAATGCAACGTGCCCTTG  
TAACACCAAATTTGATCAGTTTTTAAAAAATGATCGTTATGTAGGTGATTGAGAAGTAAATGATTCTTTTTTA  
AGGTAAAAATTTGACCCCTTATCATGCATACCCCTCTGTGCTCTTCAAATCAACATCATTATTAATATCTGTA  
CATTTTTGCTCATCTGAGCCAGCACAGGCTGAGGCTGTGAGTGGACACCTTTGGTTGTTGGGTTTCTGTGAG

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**FIGURE 2249C**

TTTCTGGGGTGAAGCTGCGTGATTGAGAACGTAGCTCTTGGCTGCCATCTCGGGGATTATTAAGGACTGTGAACT  
CTATCCACAAGCCATGGCAATATCTGTCCCACCGAATGCTCCCTCTAACACACTCTTACTCCCGTGATGTGTGTT  
AAGGGCTCCGATGATGCTGAAAACAGCACAGGATGTGAAAAGGCAGGAACAGTTCTGAAGTCAAAGGCTGATGTC  
CTGTTTCTCTTTCCCTCTGTGACCGACTCCCTTCCCAGTGGTAACAAGTACCCACAGCTTGGTTTGAATTTCTGC  
ACGCTGTTGTCTGTGCACTCGCTCACACTTACGCACACAGCAGGCATGTGGGCGATGCTGGGTATTTGTGTATG  
AGTGGGATGCACATACACACATCTACATCCATATCATGCCCATGCATCTGTAAGTGTCTTTCCCGTGTAAAGAAC  
ACTTCTTAGAGTTTGTTCATGTCATGTGTCTGTGTGAATGATTGAAGGCATTTCTAACCCATTTTAAAGATGGCT  
ACTTAGGACCATATGGATGTTGTACTGATGTCATTTGACCACGTCCATTGTTTCCATCTTTTGGGCTGTTCTTGT  
GTATTTTACTTTCCATGTAACTGTGACATTGAGAATTGGTACCTACAACAGTCTATTTGCTTTACATTAAATT  
TG TAGGCTAATTTGTGTAAAAAAAAAAAAAAAAA

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**FIGURE 2250**

MGLSHAVAGDLLLPATPCWTGAWASPGCLCLGFVTQGLCRRAQSISPWEAQGCLELCGPALAGELVWVFRLYPS  
TS



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**FIGURE 2251**

CCAGAAACAGACCTGGGAGTGGAACAGCAGCAGTTAGGAGAGGACCCTGCTGGGGTCCAGGAGCCCGCCTGCCTG  
GCTGCCCAACCAGCTCCAACACTGCTGGAGGCCTCCATTCTCTGTTTCAGGGGAAGGCCCACTGGTTAGCTCAGAG  
ATGGCTTCTGCGTGCTTTCTCCCTTCCGTCCTAGAGAACACATATTTCTGTTTCTCCCTTGCCCTTCTCCCACT  
TGGACCTGCTCAGAGCCCTGTGTACTCTGGTGTGTGGCCTCTCTCCCTCTCTCTTTCTCTCTCTGGAATTCTT  
TCCTATCTTATCCACAATCTCTACCCTTTATCTTGCCGTTACTCTACCCCGAGACTGCCTTCTGCCCTGGGTCC  
CACCAAAATAGATCCTGTCTTCCCTTAGTGAAAATGAGGCCACCTCTTGGGGAACAGAAGACGCCCCAGTGAAAA  
CAGAGTGCAAACCTGGCCTGGCATGGGAGCCTCCTTCTGGCCAATCAGGCAGGCCAGAGAACAGCAGCGGAGGGC  
CCTGTCTTTTCAGGCAGACCTCATGGCTGAGTGAGCCTCCCTTGGGCCAGCACCCCACTCAGCATGGTCCAAGC  
CCATGGGGGGCGCTCCAGAGCACAGCCGTTGACCTTGCTTTGGGGGCAGCCATGACCCAGCCTCCGCTGAAAA  
AACGCCAGCCAAGAAGCATGTGCGACTGCAGGAGAGGCGGGGCTCCAATGTGGCTCTGATGCTGGACGTTTCGGTC  
CCTGGGGGGCGTAGAACCCATCTGCTCTGTGAACACACCCCGGGAGGTACCCCTACACTTTCTGCGCACTGCTGG  
ACACCCCTTACCCGCTGGGCCCTTACAGCGCCAGCCACCCAGCCCCAAGCAACTGGAAGAAGAATTCTGAAGAT  
CCCTTCAAACCTTTGTCAGCCCCGAAGACCTGGACATCCCTGGCCACGCTCCAAGGACCGATACAAGACCATCTT  
GCCAAATCCCCAGAGCCGTGTCTGTCTAGGCCGGGCACAGAGCCAGGAGGACGGAGATTACATCAATGCCAACTA  
CATCCGAGGCTATGACGGGAAGGAGAAGGTCTACATTGCCACCCAGGGCCCCATGCCAACACTGTGTGGGACTT  
CTGGGAGATGGTGTGGCAAGAGGAAGTGTCCCTCATTGTCTATGCTCACTCAGCTCCGAGAGGGCAAGGAGAAATG  
TGTCCACTACTGGCCACAGAAGAGGAAACCTATGGACCCTTCCAGATCCGCATCCAGGACATGAAAGAGTGCCC  
AGAATACACTGTGCGGCAGCTCACCATCCAGTACCAGGAAGAGCGCCGGTCAGTAAAGCACATCCTCTTTTCGGC  
CTGGCCAGACCATCAGACACCAGAATCAGCTGGGCCCTGCTGCGCCTAGTGGCAGAGGTGGAGGAGAGCCCGGA  
GACAGCCGCCACCCCGGGCTATCGTAGTCCACTGCAGTGCAGGGATTGGCCGGACGGGCTGCTTATCGCCAC  
GCGAATTGGCTGTCAACAGCTGAAAGCCCCAGGAGAAGTGACATTCTGGGTATTGTGTGCCAACTGCGGCTAGA  
CAGAGGGGGGATGATCCAGACGGCAGAGCAGTACCAGTTCTGACCACACTTTGGCCCTGTATGCAGGCCAGCT  
GCCTGAGGAACCCAGCCCCTGACCCCTGCCACCTCCGGTGGGCCAGGTGCCTACCTCCCTCAAGCCTGGGAAGG  
TGGGTCTGGGGAAAGTGGGCCGAGTGATCTGGGGGTACCCCTTGGGTGGTGTGGGGAAGGAGTGCTCTTAGT  
GGTGCTTGCACTCAGGAAGCAGCAGCAGTAAGGACAAGGGGCCGGATTCCAGGTCTTCAACACTGGCCACTCC  
TCTGCTTCTCTGTTGGCCCCAGATGGACAGTAAGGGGAACCTCCAATGTCTCTCTGAACCTAAAGACAGGAGCT  
GGCATTATGACAGACAAAGAAAGAGCCAGGTGTCTGGTGTCTCTGAGACACTCTTTGTGAGCTTCAGTTT  
CCTGTTCTATAACATGAACATAAGTGCTTAGCTGCCATGAGGGAAAAGTAATGAGAGAAGTTCTAGAAGCCACT  
CCAGCCACTCCTTCTGGGGCTGACAAAAGGGTGATTCCAAGATCATCCTTACCCGAGGTCTGCCCAAGCACA  
GGCCAGATGCAAGAATGGGGAAGTCTGGTCTGATCTCCAAGTCTCAACATCCTATCAGTACTCTGCTCCCT  
GACCACACATCGGAAGGGCTGGATGACCCCAATCAAAGAAAGAACAGGACTCTGGTTACCCTTGCCCTCCACCC  
ATGTGTCTAAGAGTAGGCTACAGAGGTGACCAGGCCTGGCAGTTGAAATCTCTGGAAGAGGGAACATGTGGGA  
CTACTCAGAGGCAAAGAGGAGTGCTCCTGCCTCCATGGTTGCTGGCCACTCCCACCACTACTCTTAGGGAGGC  
TAAGCAGTCTCTGTTTTGCTTCCATGGCTCAAATAATACCTGGGTATGCAGGACCCACTATACCTTGCATTTGC  
TGAGTACACCTAGAGAGCTTGGCTGTTTCCAAAAACAATCAGGGTCATAACCATCCATGCAGACATGGAGGCTCG  
GCTGAACCAGGACTCCTCACTGTCTACCTGAGAGAATGAGCACCCCTCATCCATCTCAGCATCAACACAATTTCC  
AGGGGACCTCAGGTCTACCTCAGGACTGAACGCCACACCTCAGGATTCTCTCCTTGAATCTGAGACTGGCTGC  
CCATTCTGAGATGGGGATGAAGGTAAAGATGCCGCATCACCAGGCACGCCGCCCTGACAGCTGCCTTGATACCAG  
CTCTCTGTGGAAACCCCGAGGAGTTGGATCTGGAGAACAGCTGGGCCTCTCACTCAGGACTTCTCTCCTGAAG  
AACACGCAGTGCTAAACTGAGGATGATTTCCCTAATGCTTCTGCTTGGCCTTATGGAGGAGCTGCTCCTTCTT  
ACAGCCTTGGGGATGGACTTGCCACACCTCCAACCTCCCTGAGCCCTGTGAGAGGCACGACTGTCTATGCCAAT  
GAGGCTCGGTGGGGGGCTCTCAAGTGCTGATCTGCCCCTGGGCTCAGAGCCAGCCAGGGGAAGCAACTGCAC  
AGCCCCACAGGCCCTCCCTGGCACTGTCCCCCAACCCCATCTCAGAGCTCAGAGGGTACAAGCTCCAGAACAGT  
AACCAAGTGGGAAAATAAAGACTTCTTGGATGACTGAC

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**FIGURE 2252**

MVQAHGGRSRAQPLTSLGAAMTQPPPEKTPAKKHVRLQEERRGSNVALMLDVRS LGAVEP ICSVNTPREVT LHFL  
RTAGHPLTRWALQRQPPSPKQLEEEFLKIPSNFVSPEDLDIPGHASKDRYKTILPNPQSRVCLGRAQSQEDGDYI  
NANYIRGYDGKEKVYIATQGMPNNTVSDFWEMVWQEEVSLIVMLTQLREGKEKCVHYWPTEETYGPFIQIRIQDM  
KECPEYTVRQLTIQYQEERRSVKHILFSAWPDHQTPE SAGPLLRLVAEVEESPETA AHGPIV VHC SAGIGRTGC  
FIATRIGCQQLKARGEVDILGIVCQLRLDRGGMIQTAEQYQFLHHTLALYAGQLPEEPS

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**FIGURE 2253**

GAGGGCGCGATCCTGGCGTCCCCGACGGCCTGGGGCCCCAATCCAGAGGCCTGGGTGGGAGGGGACCAAGGGTG  
TAGTAAGGAAGCGCCTTTTGTGGAGGGCAACGGACCGGGGCGGGGAGTCGGGAGACCAGAGTGGGAGGAAGGCG  
GGGAGTCCAGGTTCCGCCCCGGAGCCGACTTCCTCCTGGTCGGCGGCTGCAGCGGGGTGAGCGGCGGCAGCGGCC  
GGGGATCCTGGAGCCATGGGGCGCGCGCGGACGCCATCCTGGATGCGCTGGAGAACCTGACCGCCGAGGAGCTC  
AAGAAGTTCAAGCTGAAGCTGCTGTCGGTGCCGCTGCGCGAGGGGTACGGGCGCATCCCGCGGGGCGCGCTGCTG  
TCCATGGACGCCTTGGACCTCACCGACAAGCTGGTCAGCTTCTACCTGGAGACCTACGGCGCCGAGCTCACCGCT  
AACGTGCTGCGCGACATGGGCCTGCAGGAGATGGCCGGGCGAGCTGCAGGCGGCCACGCACCAGGGCTCTGGAGCC  
GCGCCAGCTGGGATCCAGGCCCCCTCCTCAGTCGGCAGCCAAGCCAGGCCTGCACTTTATAGACCAGCACCGGGCT  
GCGCTTATCGCGAGGGTCACAAACGTTGAGTGGCTGCTGGATGCTCTGTACGGGAAGGTCTTGACGGATGAGCAG  
TACCAGGCAGTGCGGGCCGAGCCACCAACCAAGCAAGATGCGGAAGCTCTTCAGTTTACACCAGCCTGGAAC  
TGGACCTGCAAGGACTTGCTCCTCCAGGCCCTAAGGGAGTCCCAGTCTACCTGGTGGAGGACCTGGAGCGGAGC  
TGAGGCTCCTTCCCAGCAACACTCCGGTCAGCCCCTGGCAATCCCACCAAATCATCCTGAATCTGATCTTTTAT  
ACACAATATACGAAAAGCCAGCTTGAAAAAAAAA

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**FIGURE 2254**

MGRARDAILDALENLTAEELKKFKLKLLSVPLREGYGRIPRGALLSMDALDLTDKLVSFYLETYGAELTANVLRD  
MGLQEMAGQLQAATHQGSGAAPAGIQAPPQSAAKPGLHFIDQHRAALIARVTNVEWLLDALYGKVLIDEQYQAVR  
AEPTNPSKMRKLFSTPAWNWTCKDLLLQALRESQSYLVEDLERS

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**FIGURE 2255**

GGGGGAAGTTGCTGGCTGACTGGGCTTGCAGAGGAAACCGCCTCGGAGCTGCAGCGAAGGCCAAGGAATCACTGAA  
GATCGGCGAGGGAGGACAGGGGGTTCATCATGGGTGGCTTTTTCTCAAGTATATTTTCCAGTCTGTTTGGAACCTC  
GGGAAATGAGAATTTTAATTTTGGGATTAGATGGAGCAGGAAAAACCACAATTTTGTACAGATTACAAGTGGGAG  
AAGTTGTTACTACTATACCTACCATTGGATTTAATGTAGAGACGGTGACGTACAAAAACCTTAAATTTCCAAGTCT  
GGGATTTAGGAGGACAGACAAGTATCAGGCCATACTGGAGATGTTACTATTCAAACACAGATGCAGTCATTTATG  
TAGTAGACAGTTGTGACCGAGACCGAATTGGCATTTCCAAATCAGAGTTAGTTGCCATGTTGGAGGAAGAAGAGC  
TGAGAAAAGCCATTTTAGTGGTGTGTTGCAAATAAACAGGACATGGAACAGGCCATGACTTCCTCAGAGATGGCAA  
ATTCACCTGGGTTACCTGCCTTGAAGGACCGAAAAATGGCAGATATTCAAACGTCAGCAACCAAAGGCACCGGCC  
TTGATGAGGCAATGGAATGGTTAGTTGAAACATTA AAAAGCAGACAGTTAATTCAGTCCATTCTTCTCCCTGAAA  
TGAAGACTACATCACCTCTCTCCCTTTGGAAACAGTCAAGTGTACTTCACACTACTAGATGTTAAACTATATGA  
TTATTGGCATATACTGACTGACTGCAATATTTGTAGTAAATAGGGAAAATAAGTATTTAGTTGGAGGGATAATTT  
GATCGAATCACCTGAATGTTCTATGTAATGTAAAATATCTTTTCTTGCTTCTTGTGTTAAGGTATATATTCTA  
TTTGTATGGAATTCTTATTCAAATACAGTTGTATTAAAGAGTATACTCCTATTGGATGAAAAAACCT

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**FIGURE 2256**

MGGFFSSIFSSLFGTREMRLILGLDGAGKTTILYRLQVGEVVTIPTIGFNVETVITYKNLKFQVWDLGGQTSIR  
PYWRCYYSNTDAVIYVVDSCDRDRIGISKSELVAMLEEEELRKAILVVFANKQDMEQAMTSSEMANSGLPALKD  
RKWQIFKTSATKGTGLDEAMEWLVELKSRQ

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**FIGURE 2257**

GGGGACTCAAGGCTGGCCTGGCTCAAGTGAACAGCACGTCCAGGAGGCGACCTCGTCCGCGGGTTTGCAATTCTGG  
GGTGGACGAGCTGGGGGTTTCGGTCCGAGCCCGGTGGGAGGCTCCCGGAGCGCAGCCTGGGCCAGCCCACCCCGC  
GCCGGCGGCCATGGCAGGCACCCTGGACCTGGACAAGGGCTGCACGGTGGAGGAGCTGCTCCGCGGGTGCATCGA  
AGCCTTCGATGACTCCGGGAAGGTGCGGGACCCGAGCTGGTGCATGTTCTCATGATGCACCCTGGTACAT  
CCCCCTCTCTCAGCTGGCGGCCAAGCTGCTCCACATCTACCAACAATCCCGGAAGGACAATCCAATTCCCTGCA  
GGTGAACACGTGCCACCTGGTCAGGTACTGGATCTCCGCCCTCCCAGCGGAGTTTGACTTGAACCCGGAGTTGGC  
TGAGCAGATCAAGGAGCTGAAGGCTCTGCTAGACCAAGAAGGGAACCGACGGCACAGCAGCCTAATCGACATAGA  
CAGCGTCCCTACCTACAAGTGGAAGCGGCAGGTGACTCAGCGGAACCCTGTGGGACAGAAAAAGCGCAAGATGTC  
CCTGTTGTTTGACCACCTGGAGCCCATGGAGCTGGCGGAGCATCTCACCTACTTGGAGTATCGCTCCTTCTGCAA  
GATCCTGTTTCAGGACTATCACAGTTTCGTGACTCATGGCTGCACTGTGGACAACCCCGTCTGGAGCGGTTTAT  
CTCCCTCTTCAACAGCGTCTCACAGTGGGTGCAGCTCATGATCCTCAGCAAACCCACAGCCCCGAGCGGGCCCT  
GGTCATCACACACTTTGTCCACGTGGCGGAGAAGCTGCTACAGCTGCAGAACTTCAACACGTGATGGCAGTGGT  
CGGGGGCCTGAGCCACAGTCCATCTCCCGCCTCAAGGAGACCCACAGCCACGTTAGCCCTGAGACCATCAAGCT  
CTGGGAGGGTCTCACGGAAGTAGTGACGGCGACAGGCAACTATGGCAACTACCGGCGTGGCTGGCAGCCTGTGT  
GGGCTTCCGCTTCCCGATCCTGGGTGTGCACCTCAAGGACCTGGTGGCCCTGCAGCTGGCACTGCCTGACTGGCT  
GGACCCAGCCCGGACCCGGCTCAACGGGGCCAAGATGAAGCAGCTCTTTAGCATCCTGGAGGAGCTGGCCATGGT  
GACCAGCTGCGGCCACCAGTACAGGCCAACCCCGACCTGCTGAGCCTGCTCACGGTGTCTCTGGATCAGTATCA  
GACGGAGGATGAGCTGTACCAGCTGTCCCTGCAGCGGGAGCCGCGCTCCAAGTCTTCGCCAACAGCCCCACGAG  
TTGCACCCACCACCCCGGCCCCCGGTATTGGAGGAGTGGACCTCGGCTGCCAAACCCAAGCTGGATCAGGCCCT  
CGTGGTGGAGCACATCGAGAAGATGGTGGAGTCTGTGTTCCGGAACCTTTGACGTCGATGGGGATGGCCACATCTC  
ACAGGAAGAATTCCAGATCATCCGTGGGAACCTCCCTTACCTCAGCGCCTTTGGGGACCTCGACCAGAACCAGGA  
TGGCTGCATCAGCAGGGAGGAGATGGTTTCTATTCTCTGCGCTCCAGCTCTGTGTGGGGGGGCGCATGGGCTT  
CGTACACAACCTCCAGGAGAGCAACTCCTTGCGCCCCGTCGCCTGCCGCCACTGCAAAGCCCTGATCCTGGGCAT  
CTACAAGCAGGGCCTCAAATGCCGAGCCTGTGGAGTGAAGTGCACAAAGCAGTGAAGGATCGCCTGTCAAGTTGA  
GTGTGCGCGCAGGGCCCAGAGTGTGAGCCTGGAGGGGTCTGCACCTCACCCCTACCCATGCACAGCCACCATCA  
CCGCGCCTTCAGCTTCTCTCTGCCCCGCCCTGGCAGGCGAGGCTCCAGGCCTCCAGAGATCCGTGAGGAGGAGGT  
ACAGACGGTGGAGGATGGGGTGTGTGACATCCACTTGTTAATAGATGCTGTGGTTGGATCAAGGACTCATTCTGTC  
CTTGAGAAAAATACTTCAACCAGAGCAGGGAGCCTGGGGGTGTGCGGGCAGGAGGCTGGGGATGGGGGTGGGATA  
TGAGGGTGGCATGCAGCTGAGGGCAGGGCCAGGGCTGGTGTCCCTAAGGTTGTACAGACTCTTGTGAATATTTGT  
ATTTTCCAGATGGAATAAAAAGGCCCGTGAATTAACCTTCAAAAAAAAAAAAAAAAAAAAAA

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**FIGURE 2258**

MAGTLDDKGCTVEELLRGCI EAFDDSGKV RDPQLVRMFLMMHPWYIPSSQLAAKLLHIYQQSRKDNSNSLQVKT  
CHLVRYWISAFPAEFDLNP ELAEQIKELKALLDQEGNRRHSSLIDIDSVP TYKWK RQVTQRNPVGQKKRKM SLLF  
DHLEPMELAEHLTYLEYRSFCKILFQDYHSFVTHGCTVDNPVLERFISLFNSVSQWVQLMILSKPTAPQ RALVIT  
HFVHVAEKL LQLQNFNTLMAVVGGLSHSSISRLKETHSHVSPETIKLWEGLTELVTATGN YGN YRRRLAACVGFR  
FPILGVHLKDLVALQLALPDWLD PARTRLNGAKMKQLFSILEELAMVTS LRPPVQANPDLLSLLTVSLDQYQTED  
ELYQLSLQREPRSKSSPTSPTSCTPPPRPPVLEEWTSAAKPKLDQALVVEHIEKMVESVFRNFDVDGDGHISQEE  
FQIIRGNFPYLSAFGDLQNDGCISREEMVSYFLRSSSVLGGRMGFVHNFQESNSLRPVACRHCKALILGIYKQ  
GLKCRACGVNCHKQCKDRLSVECRRAQSVSLEGSAPSPSPMHSHHRAFSFSLPRPGRRGSRPPEIREEEVQTV  
EDGVFDIHL



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**FIGURE 2259**

CGGCGCCGAGTAGCCGGGCCGGGCCGGAGCGCGGGCGCGCGGAGGCAGCTGCGCCCCGGCTCCTCCCCCTCCCAGG  
CCCCGCCCCCGCCCGGGCCCCGGCGATGGTGACACATGCGGCGGCGGCCGCGCGGCAGGACCATGCTTGAGCGC  
GCCAGCAAGTTCGTGCTGGTGGTGGCGGGCTCGGTGTGCTTCATGCTCATCTTGTACCAGTACGCGGGCCAGGA  
CTGAGCCTGGGCGCGCCCGGCGCGCGCGCCGACGACCTGTACCTGTTCCCCACGCCCCGACCCCCACTAC  
GAGAAGAAGTACTACTTCCCGGTCCGCGAGCTGGAGCGCTCGCTGCGCTTCGACATGAAGGGCGACGACGTGATC  
GTCTTCCTGCACATCCAGAAGACGGGCGGCACCACTTCGGCCGCCACCTCGTGACAGACGTACGCCCTCGAGGTG  
CCGTGCGACTGCCGGCCCGGCCAGAAGAAGTGACCTGCTACCGGCCCAACCGCCGCGAGACTTGGCTCTTCTCC  
CGCTTCTCCACCGGCTGGAGCTGCGGGCTGCACGCCGACTGGACCGAGCTCACCAACTGCGTGCCCGCGTGCTG  
GACCGCCGCGACTCCGCGCGCTGCGCACGCCCAGGAAGTTCTACTACATCACCTGCTACGAGACCCCGTGTC  
CGCTACCTGAGCGAGTGGCGGCATGTGCAGAGGGGTGCCACGTGGAAGACGTCTTTGCATATGTGTGATGGGCGC  
ACGCCCACGCCTGAGGAGCTGCCGCCCTGCTACGAGGGCACGGACTGGTGGGCTGCACGCTACAGGAGTTTCATG  
GACTGCCCCGTACAACCTGGCCAACAACCGCCAGGTGCGCATGTGCGCGACCTGAGCCTGGTGGGCTGCTACAAC  
CTGTCTTCATCCCCGAGGGCAAGCGGGCCAGCTGCTGCTCGAGAGCGCCAAGAAGACCTGCGGGGCGATGGCC  
TTCTTCGGCCTGACCGAGTTCCAGCGCAAGACGCAGTACCTGTTTCGAGCGGACGTTCAACCTCAAGTTCATCCGG  
CCCTTCATGCAGTACAATAGCACGCGGGCGGGCGCGTGGAGGTGGATGAAGACACCATCCGGCGCATCGAGGAG  
CTCAACGACCTGGACATGCAGCTGTACGACTACGCCAAGGACCTCTTCCAGCAGCGCTACCAGTACAAGCGGCAG  
CTGGAGCGCAGGGAGCAGCGCCTGAGGAGCCGCGAGGAGCGTCTGCTGCACCGGGCCAAGGAGGCACTGCCGCGG  
GAGGATGCCGACGAGCCGGGCCGCGTCCCCACCGAGGACTACATGAGCCACATCATTGAGAAGTGGTAGTGGCGG  
TGGTGGCCACGGGGAGGCCTCTTGGGGGGTGTGGGGGATAAAACAGGACAGACGACAGGTCACCCCAAGACTGTC  
AAGGGATGAGCATCCCAAACCTGCTCCACAGAGGTAGCTGCGTCTTGAAAAAACAGAGCAGGGATGTAGTGGG  
GCTGGGCAGGGATGGGGGCTTGAGAAATCAACAGGTGCAGCCAGTGGGTGAGAGGAAAGCGTGTCTGAAGGATG  
CCATGGTCAGGGCAGGGCCTCCAGAGCAGGTGTTGTGCTGGAGCTGCTCTCCTGGCCTCCTTGGATTTATCGCA  
AAACTGAAGGTTTTCGCAAGAGACGAGGACAGCGGAAAGTGGACCTGCCAGGCCGGGAGTGTGTCCCTCACCAA  
CTATGCACACAGCACTCGCTCTTAACCTCTGTCCGGGCTACTAGGAGTGAGACCAGCTTCTGGCAACTGCCCC  
AGCTCCAGGCCATCCCATAGCCCCTCCTCTTCTGGCTGCCCCCAATGCCCGAGGCCTGGGGAGCCCCCAGCTCA  
CCCATCTGTAGCTCCCTCAAAGTCAGGGCCCCACCCCATCTGAGGCAGAGAAGACTCGAGTCCAGCCCCCAGGAAG  
CCTGCTCCCCCTCTGCCCCATGGTCTGCTTCATGCTTTGGGTCAGGAGGCCAAAGCTGATGTTACAGGCCCCAC  
CCACTCCCTACAGTCCTCAGACCCCG

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**FIGURE 2260**

MVERASKFVLVVAGSVCFMLILYQYAGPGLSLGAPGGRAPDDLYLFPTDPHYEKKYYFPVRELESLRFDKMG  
DDVIVFLHIQKTGGTTFGRHLVQNVRLVPCDCRPGQKKCTCYRPNRRETWLF SRFSTGWSCGLHADWTELTNCV  
PGVLDRRDSAALRTPRKFFYYITLLRDPVSRYLSEWRHVQRGATWKTSLHMGDGRTPPTPEELPPCYEGTDWSGCTL  
QEFMDCPYNLANNRQVRMLADLSLVGCYNLSFIPEGKRAQLLLESAKKNLRGMAFFGLTEFQRKTQYLFERTFNL  
KFIRPFMQYNSTRAGGVEVDEDTIRRIEELNDLDMQLYDYAKDLFQQRYQYKRQLERREQRLRSREERLLHRAKE  
ALPREDADEPGRVPTEDYMSHIEKW

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**FIGURE 2261**

CTGTGCGCTGCTGAGCTGAGCTGGGGCGGGCCGCTGTCTGCACCGGCAGCACCATGTCGCTCATGGTCATCAG  
CATGGCGTGTGTTGGGTTCTTCTTGCTGCAGGGGGCTGGACACATGAGGGTGGTCAGGACAAGCCCTTGCTGTC  
TGCCTGGCCCAGCGCTGTGGTGCCTCGAGGAGGACATGTGACTCTTCTGTGTCGCTCTCGTCTTGGGTTTACCAT  
CTTCAGTCTGTACAAAGAAGATGGGGTGCTGTCCCTGAGCTCTACAACAAAATATTCTGGAAGAGCATCCTCAT  
GGGCCCTGTGACCCCTGCACACGCAGGGACCTACAGATGTGGGGTTCACACCCACGCTCCCCATTGAGTGGTC  
AGCACCCAGCAACCCCTGGTGATCGTGGTCACAGGTCTATTTGGGAAACCTTCACTCTCAGCCCAGCCGGGCCC  
CACGGTTCGCACAGGAGAGAACGTGACCTTGTCTGCAGCTCCAGGAGCTCATTTGACATGTACCATCTATCCAG  
GGAGGGGAGGGCCCATGAACCTAGGCTCCCTGCAGTGGCCAGCGTCAATGGAACATTCCAGGCTGACTTTCCTCT  
GGGCCCTGCCACCCACGGAGGGACCTACACATGCTTCGGCTCTCTCCATGACTCACCCCTATGAGTGGTCAGACCC  
GAGTGACCCACTGCTTGTTTCTGTACAGGAACTCTTCAAGTAGTTCATCTTCACCCACTGAACCAAGCTCCAA  
AACTGGTATCCGCAGACACCTGCACATTCTGATTGGGACCTCAGTGGCTATCATCTCTTCATCATCCTCTTCTT  
CTTTCTCCTTCAATTGCTGCTGCTCCAACAAAAGAATGTGCTGTAATGGACCAAGAGCCTGCCGGGGACAGAAC  
AGTGAACAGGGAGGACTCTGATGATCAAGACCCTCAGGAGGTGACATATGCACAGTTGGATCACTGCGTTTTTAC  
ACAGACAAAATCACTTCCCCTTCTCAGAGGCCCAAGACACCTCCAACAGATACCACCATGTACATGGAACCTCC  
AAATGCTAAGCCAAGATCATTGTCTCCTGCCATAAGCACCACAGTCAGGCCCTGAGGGGATCTTCTAGGGAGAC  
AACAGCCCTGTCTCAAACCGGGTTGCTAGCTCCCATGTACCAGCAGCTGGAATCTGAAGGCATCAGTCTTCATC  
TTAGGGGATCGCTCTTCTCACACCACAAATCTGAACATGCCTCTCTCTTGCTTACAAATGTCTAAGGTCCCCAC  
TGCCTGCTGGAGAGAAGACACACTCCTTTGCTTAGCCCACAATTCTCTATTTCACTTGACCCCTGCCACCTCTC  
CAACTGAACCTGGCTTACTTCCCTAGTCTACTTGAGGCTGCAATCACACTGAGGAACTCACAATTCCAGACATACAA  
GAGGCTCCCTCTTAACATGGCACTGAGACACGTGCTGTTCCACCTTCCCTCATGCTGTTTTACCTTTCTCAGAC  
TATTTTCCAGCCTTCTGTGTCAGTCAGCAGTGAAACTTATAAAATTTTTTGTGATTTCATGTAGCTGTCTCCTTTT  
CAAATAAACATGTCTGCCCTC

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**FIGURE 2262**

MSLMVISMACVGFFLLQGAWTHEGGQDKPLLSAWPSAVVPRGGHVTLLCRSRLGFTTIFSLYKEDGVPVPELYNKI  
FWKSILMGPVTPAHAGTYRCRGSHPRSPIEWSAPSNPLVIVVTGLFGKPSLSAQPGPTVRTGENVTLSCSSRSSF  
DMYHLSREGRAHEPRLPAVPSVNGTFQADFPLGPATHGGTYTCFGLHDSPIEWSDDPSDLLVSVTGNSSSSSSS  
PTEPSSKTGIRRHLLHILIGTSVAIILFIILFFLLHCCCSNKKNAAVMDQEPAGDRTVNREDSDDQDPQEVTYAQ  
LDHCVFTQKITSPSQRPKTPPTDITMYMELPNAKPRSLSPAHKHHSQALRGSSRETTALSQNRVASSHVPAAGI

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**FIGURE 2263**

TTTTTTTGTCTTTTGCAGATTTGAAATTTAATTAAGCTATTAACCTCTTAATCATCACATCCTCCAACCTCTGTT  
TTAACTCCCCCTCCCCCTCCCCCTTTTTTTTAAAGGAATAAAGGGATTCAATTCCTCATTTTAACTGATGTTACAG  
TGAAGATGGGTTCTTGAACCTTTGGAAGCCTGGATGAGCCACCTAATCTCAAAGATAAAAAACCAAGACCAATGC  
GTATTGGGGAAAAGAATGCTTAGTACTGCAAGACTGTTGAATACCTGTTGAATATTCCTATTGAGGTTTTTTCCT  
AAACATACTTCAGTAACATCTTACCGGACAATTGCACCTGGAGAAATGTTGATCCCTGGCTGGAATGTCATACCAT  
TGACCCATTTGAAGAGTTAAAGCTGGATTGACTGCTCTATTCTACCAGGAATATTGTTAGGGTAGCCTTTTCCA  
GTTTCTAAACAATTGTAATCATTTATTGACTCAGCAATTCCTCAGATAACAGGTCAAAGATGTACAGATACATT  
CTGAAGTTTTCTTGCTATTAAAGGCACAAGAGTTTCCTTGATTTTTGACTGACAATGTAGCATGTTTCCATTAG  
TTTGTTAGTGAGGTGGTTTTCCCTTTGAAAGCCATTTGGTATATTACCATAACAATTAGTTAATATGATTACA  
TAAGAAAATATGATAAAACCCAGCAATTTAGTAGTTGTGAAAATACGTTTTTTAAATCATGTTAAGAAGAAT  
TGCAAGACTTGAAACCAATCCTGATGGGGGAATTCTGTTAATCCTGTTAATCTGTTAATTTCTGTTAATC  
CTTAGTTTCTTAACCTGCATAGCTTATCCTGTATTGTACTTTTTTCTTTTTTAACTCCCAAACAAGAAGCTTG  
AACTTTTTCTGTATTTTTAAATTTGAAATTTGGTCACAGGGTATAGTCAGATTTTTATTAAAGTTTGGTTTGACA  
ACCTTTAAAGAAAGGTTTACCTCGCTAATACTTCTTAATAACATGCATCAAATGATATTCCCTATGGTGAAGTAT  
ATCTCAAAGTTATGTATCTTTCATTTTTGGCATTGTTGGTGTATGGACTTAGTACCCAGGCAACAAGATCTATT  
ATCACCTACTCTCTTGTATTGCTATTATTTCCCAAAAAAAAAAAGGGGCATATATCATAAGAATAATATTAGA  
ATTATTTTGTCTCTCCACAAGCCCATGGTAGAGATTTCTATGTTCCCATTTCCCTTTCACTCAGAGTTATGTT  
GACTGGGGGGGGTGGCTCATTGGGAAGCCAGGCGGGTGAATCACTTGAGGTCAGGAGTTCAAGACCAGCTAGC  
CAATCACGGCGAAACTCCGTCTCTACTAAAAATATAAAATTAGTCCCGTCTCTACTAAAAATATAAAATTAGT  
CAGACGTGGTACCTGTTTGGTGGTGTGCATCTGCTAGTCCCACTACTCGGGACGCTGAGGCGAGGTGAATTGCAT  
GATCCAGGAGGCAGAGGCTGCAATGAGCTGAGATCATGCCACTGCACCTCCAGCCTGGGTGACAAGTGAGACTGTC  
TCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAACAAGGGTCCTTACTTGCATTAATGCATCCACATTATTCCAT  
GTACTCACCAGGATTTTTTGTATATAACAAAAATACCCACTCTGGTTACTTATTAAGATTATCAGTCAATTTA  
CAAAAACAACAGGAAGATTTACAAAAGAAAAAAACAAAGGAAGCAAGAACATCCAGAATCAGACACAGAAT  
ACTGTGCTTAAATGCTGCTGCAAGGAGTATTAATTAACCTTATACCTACTGTGACACTTAACAGGCCAGGTGTG  
GTGGCTCACGCCTGTATCCAGCACTTTGGGCTGAAGGCGGAGTACACTTGAACCCAGGACAGCCTGGGCAACAT  
GGTGAGACCCCGTGTCTACAAAAATAAAAAAGCCGGGAGTGGTGGCAAGCTCCTATAGTTCCAGCTACTTGGGA  
GACTGAGGTGGAGGGATCACTTCAGCCTGGGAGGTCAAGGTCACAGTGAGCTATAATCAAGCCACCGCACTCTGG  
CCTGGGCAACAGAGACAGTCTCAAAAAGAAAAAAAGCACTTAACACACTTTATGAATACAATATGGCACA  
TCTATCTGCCCATTAGAGTGAGACTCCTGAGTATTTACTCATCTTCCATTCTCAAATGCAAAGAGTATGTGGC  
ATATAATAACTGTCCGAATGTACGACTGACATCTTAAAGCGTGTGGTGGCAAACCTTTTTCGTAAAGGGCCAGG  
TAAGTAAACATTATAAGCTTTGTAATCCACACAGTCTCTGTTCAAACCATTTACTGTTGTAGCAGGAAAGCAGC  
CATGGATAATATGTAAACAAGTCAGCTACGATGTGTTCAAATAAACTTTATAAAAAACAGGCAGTAGGCTGGGTT  
TAGCCCATGGACCAATTTGCCAAGTATTTAACAAGAATCAACACTTTTCCTTTCATAATTTAATTGAAGTTGG  
TACCTACAAAGATATGAGCTCACTACTACATATGACTATCTGTAATGGATCAATTTGGATATGACTTTGGGTGG  
GGGTAAAAAAGAACCGAAGACATGTAATATAGATGAATAATGAAAAAACAGGGCTGGGTGCAGTTGCCTGCAC  
TTTAGGAGGCTGAGGCAGGAGCATCTCTGGAACCTGGGAGGCAGAGGTTGCAGTGAGCCAAGATTGCGCCATTGC  
ACTCCAGCCAAGGGGACAAGAGCAAAAAACAAAAACAAAAACCTTTAAGGTACCAGCCTGGCTAAGCAGT  
TAACATACCTCACTTTATCAG

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**FIGURE 2264**

MGEFCLILFNLFNFCILSFLTCIAYPVLYFFSFLNSQTRSLKLFYFKIEIWSQGIVRFLLRFGLTTFKERFTS  
LILLNNMHQMIFPMVKYISKLCIFHFWHLVMDLVPRQQRSIITYSLVFAIISQKKKRGYHKNNIRIILFLPQA  
HGRDFYVPILPFTQSYVDWGRWLIWEAKAGESLEVRSSRPASQSRNSVSTKNIKISPVSTKNIKISQTWYLFGG  
VHLLVPTTRDAEAGELHDPGGRGCNELRSCHCTPAWVTSETVSKKKKKKKKKTRVLTCLINASTLFHVLTRFCY  
KQKYPLWLLIKRLSVNLQKQEDLQRKKKQRKQEHPELTAQNTVLKMLLQGVLINLYPTVTLNRPGVVAHACIPA  
LWAEGGVHLNPGQPGQHGETPCLQKIKKPGVVASSYSSSYLGD

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**FIGURE 2265**

GCGGCCGCGTCTGACTGTGACACTGCCAGCAGCGCGCAGAGGGAGGGATGGGGCGGGTATCGGCGTAGGGGCCCT  
CGGAAAGAACGGATATTGCTGTGACACCGCGGGGACGCTCTGAAGGGACGAGTGTGCGGTGTGGCACC GGTCACG  
CTGAAGGAGCCGGCGGAACCGGGTGGCCATGGGGATGTGGGCATCGCTGGACGCTTTGTGGGAGATGCCGGCCAA  
GAAGCGTATCTTCGGGGCCGTGCTGCTCTTTCTGGACAGTGTATCTTTGGGAGACCTTCTAGCACAGCGGCA  
GAGAAGGATATATAAAACAACAACCTCATGTACCACCGGAGTTAGGACAGATCATGGATTCTGAAACATTTGAGAA  
ATCTCGACTCTATCAACTGGATAAAAGCACTTTCAGCTTCTGGTCAGGACTCTATTAGAGACTGAAGGCACCTCT  
TATTCTTCTCTTTGGAGGAATACCTTATCTCTGGAGACTTTCTGGACGGTCTGTGGTTATGCTGGCTTTGGACC  
AGAATATGAGATCACTCAGTCCCTGGTGTCTCTGCTGTTGGCTACACTTTTCAGTGCATTGACTGGTTTGGCCATG  
GAGTCTTTATAATACTTTTGTGATAGAAGAAAAACATGGCTTCAATCAACAGACTTTGGGGTTCCTCATGAAAGA  
TGCAATCAAGAAATTTGTTGTGACTCAGTGTATTTTGTGCGCTGTGCTTCACTTCTACTTTACATTATTAATAAT  
TGGGGGTGACTATTTTTTTTATTTATGCTGGCTGTTACATTAGTTGTGTCTCTGGTTCCTTGTACAATCTATGC  
TGATTATATTGCCCTTTTATTTGACAAATTCACACCTCTGCCTGAGGGAAAGCTTAAAGAAGAAATTGAAGTAAT  
GGCAAAGAGTATTGACTTTCCCTTGACGAAGGTGTATGTTGTGGAAGGATCTAAACGCTCTTCCACAGCAATGC  
TTATTTTTATGGCTTCTTCAAGAACAAGCGAATAGTTTTGTTTGACACTCTACTAGAAGAGTACTCTGTACTAAA  
CAAAGACATCCAGGAGGATTCTGGCATGGAACCCGCAATGAGGAAGAAGGGAACAGTGAAGAAATAAAAGCTAA  
AGTTAAAAATAAGAAACAAGGATGTAAAAATGAGGAGGTACTCGCTGTACTAGGCCATGAAGTGGGGCACTGGAA  
GTTGGGACATACAGTCAAAAATATCATTATTAGCCAGATGAATCTTTCTGTGTTTTTTTTTTTATTGCTGTATT  
AATTGGTCGAAAGGAGCTTTTTGCTGCATTTGGTTTTTATGATAGCCAACCCACTCTTATTGGACTATTGATCAT  
CTTCCAGTTTTATTTTTTACCTTACAATGAGGTCTTTCTTTTTTGCTAACAGTCTTAAGCCGCAGATTTGAGTT  
TCAAGCTGATGCATTTGCCAAGAACTTGGGAAGGCTAAAGACCTTATATTCTGCTTAAATCAAACCTTAACAAAGA  
TAACTTGGGATTCCCTGTTTCTGACTGGTTGTTCTCAATGTGGCATTATTCTCATCCTCCACTGCTAGAGAGACT  
TCAAGCTTTGAAACTATGAAGCAACACTGAGATGTCCAGGATCTGTGACTGAAGACATTTCTGATTATTTCTGT  
CCTGGCAGCATGTTCCAGCTCTTGATGTTTTTAACTTTTTTTAGAGAAAAATTAAGTACAGAAAAAGCCAGAT  
TTAAATACATTTAATATGTCAATTTAAAAATGATTTAATAATTCATTTCTTAAACACTGAATGAATTTTGAAG  
CTTAATGTTTTTAAAGGCATAGTTTTATCTTTGACATCTAATTTACCATCAAGTTGTAAAAATTATTTGGAAAAAT  
ACAGAACTCGTTTTATTGTATACTTATATGGAATCTGCATGTGAGGTGTTTGAGGGCATATGTTTGAAAGAGGG  
AGCATCACACAGGAATCCTTTCTGTGAGGTGGAACAGTGGTCCTGAATCATTGTGCTCACACCTAACTTGAAA  
TCTGTCCTTACTTTTATGCTGTTATGATTTACCTGGTGAATCAGTGTTTTAAATAAGAAAGGTAATAGTTGGTA  
AGGCCAATGTTATTTAAATGAAAGTAGTTAGAAAAATGCTCTCCTATTCTACCAAATTTTTAATTTCTTCTTCC  
CTTTCTTGCTACACAGTGATCAAGAGTTTCTCATAGTGCTTTGAAGTTAGAAATTATGTATAGGATATTTAAAT  
CATTGAGTTTTGTGGGGTTTTTTTGTGTTGTTGTTCTTTGTTTTTTGGAAAAATCCGTGCTTTATCTTTTTTT  
CCCACGTGGTAGATATGATCCCATTGGAGGTAAATTGTAGCTTCTTCTCATTATGCAGTAAATAATACATCCTT  
TCACTCAGCAGAGATGGCCATATTAACACGTTTTGCTATGTTAAAAGTGGCAGAACAGGAAAGACGAATTAATA  
ATAACATTTTTTAAGCGACATAAGGATGAAATACTGATGAATCTCTGTGACATTACAGGGAAAAAATATAGTTT  
TCTATCTCTTTCAAGGGCAGAAGAGTTTTCATTTTTATTTTTGTAATTTATCTGTAAGTCATAAATATTACTTAA  
TCAGGCTGATTCTACTTTTGAATTTACAGTTCCTGAAATGCAGATAATGTTTACTTTGAAAACAAATGTCATG  
AATGATTTCCAGTTTTTAAAGCTATATGTTTCACTGCTTCATATCTCTGTCCACTTTCTGAATGAGAACTTATTT  
TGTGCTTAGAGCTCTCACTCACTGATAATGCTTATTACCTTCTGGGCATTTATTCCAAAGTGGGATCACTGTAC  
GCCTTTGGTATCTGACCATAAAGTCTTTTGCTCCGCTGACATTTGGGTGATGTCTTCACATGGAAATATAATAAA  
AATAAAATCTAGTTTTAAAAA

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**FIGURE 2266**

MGMWASLDALWEMPAKKRIFGAVLLFSWTVYLWETFLAQRQRRIYKTTTHVPPELGQIMDSETFEKSRLYQLDKS  
TFSFWSGLYSETEGLILLFGGIPYLWRLSGRFCGYAGFGPEYEITQSLVFLLLATLFSALTGLPWSLYNTFVIE  
EKHGFNQQT LGFFMKDAIKKFVVTQCILLPVSSLLLYIIKIGGDYFFIYAWLFTLVVSLVLVTIYADYIAPLFDK  
FTPLPEGKLKEEIEVMAKSIDFPLTKVYVVEGSKRSSHSNAYFYGFFKNKRIVLFDTLLEEYSVLNKDIQEDSGM  
EPRNEEEGNSEEIKAKVKNNKQGCKNEEVLAVLGHELGHWKLGHTVKNIIISQMNSFLCFFLFAVLIGRKELFAA  
FGFYDSQPTLIGLLIIFQFIFSPYNEVLSFCLTVLSRRFEFQADAFAKKLGKAKDLYSALIKLNKDNLGFPVSDW  
LFSMWHYSHPPLLERLQALKTMKQH



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**FIGURE 2267A**

AGCGCATGGAGCCAGAGGAGGAGGATGAACTAGGCTCAGGGCGGGATGTGGATTCCAACCTCCAACGCGGACAGTG  
AGAAATGGGTGGCAGGAGATGGTTTGAAGAACAGGAATTTCTATCAAGGAGGCAACTTCACAGAGGGAAGTC  
TGAAGCTAAAGATTGAGACCACAAAGCGGGCTAAGAAACCCCAAGAAATTTGGAGAACTATATATGTCCACCTG  
AGATCAAGATCACCATCAAGCAGTCTGGGGACCAGAAAGGTGTCCCGTGCTGGAAAAATAGCAAAGCCACGAAGG  
AGGAAGAAAGAAGCCACTCCAAAAAGAAGCTCCTCAGAGCCAGTGACCTTGACGCCAGTGACCTCAAAGGATTTT  
AGCCACAGGCTTACGAAAGGCCCCAGAAACATTCAACTCTCCATTATGACACGGGCCTCCACAGGACTTCACCG  
GTGACACCTTAAACCAAAGCACCAGCAAAAAAGCAGCAGCCAGAACCACATGGACTGGTCCACCAACTCTGACA  
GCGGACCCGCTCACTCAGAATTGCTTCATCAGTCCAGAGTCTGGCAGAGAACTGCAAGCACCAGCAAGATCCCCG  
CTCTTGAGCCCGTGGCTTCCTTTGCAAAGGCCCCAGGGTAAGAAAGGCAGTGCAGGGAACACGTGGAGTCACTGT  
CTAACAATAACAAAGATCTGCTCTTGGGAGGTGTGGCTCCATCCCCAAGCAGCCACAGTCAACAGCCCCACCCA  
GCAGCTCTGCTGAGTGCAACGGGCTTCAGCCCTTGGTGGATCAAGATGGAGGAGGTACAAAGGAGCCCCAGAAC  
CACCTACGGTGGGCAGCAAGAAAAAGTCCAGTAAAAAGATGTGATAAGTCAGACCATAACAAACCCAGACCTGG  
ATTGGGTCAAGAATGCCAGAAAGCATTGACAATACAGAAGGGAAAAGGGAAGGTTATTCCGCAGATAGTGCCC  
AAGAGGCATCACCAGCCAGGCAGAACGTGAGTTCTGCCAGTAATCCTGAAATGACTCAAGTCATGTCCGGATTA  
CTATCCCCATCAAGGCACCTCTCTGGATCCAACCAACCATAAGAGGAAAAAAGACAGTCCATTAAAGCGGTGG  
TGGAAAAGATCATGCCAGAGAAAGCCTTGGCTTCTGGAATCACCATGAGCAGTGAAGTAGTTAACAGGATACCTT  
CCAACCTCTGAGGGGAATAAGAAGGATCCCCGTGTCCCTAAGTTGAGTAAATGATAGAGAAAGTAGTCCCCCTCAG  
TTGGCCTTGAACTGGTGGAAATGCTGAGAAAGTTATCCCAGGAGGTGTGTCTAAGCCGCGGAAGCCACCCATGG  
TCATGACACCTCCAACGTGCACAGATCACTCTCCATCCAGAAAGCTGCCAGAAATCCAGCATCCAAAAATTTGCTG  
CAAAACGAAGGTGGACTTGACAGCAAAACCAAAACCTAGCACCATGCTTCGAGAGGCAGTTATGGCCACCTCTGATA  
AACTGATGCTGGAGCCCCGTCTGCATATCCCATCACCCCATCCAGCCCTCTCTACACCAACACAGACAGTCTTA  
CTGTGATCACTCCAGTCAAAAAGAAGCGGGGACGACCAAGAAGCAGCCTTTGCTCACAGTCGAGACGATTATG  
AGGGAACCTCCACCAGCCCCGTCACTCCCATCAGCCGAGAGTTTCTTGGCACTAAGAAAAGAAAGCGACGACGCA  
ATTTAGCGAAGTTGGCCCAGCTAGTGCCGGGAGAGGACAAACCCATGAGCGAGATGAAATTTCAAGAAAGTTG  
GAAAGCTCGGCGTGTGGATAAGAAGACCATCAAACTATCAATAAGATGAAGACACTCAAGAGGAAAAACATCT  
TGAATCAGATCTTGTCTGTTCAGCAGCGTGTCTGAAGGCAAAAGCTCCCCAGAGACCAGCCCTGGGGCAG  
CAGCCATTGAAAGCAAACTGGGCAAGCAGATTATGTGAGCAAGAGGGGAACCATCTACATTGGCAAGAAGCGGG  
GCAGGAAGCCAAAGAGCAGAGCTGCCACCCCATCCGAAGAACCCAAAACAGCCATCAAGCACCACAGGCTGTTT  
CTAGCCAGCCGGATGTTCCAGCCGTGCCTTCCAACCTTTCAGTCACTTGTGGCGTCTTACCAGCAGCTATGCACC  
CACTTTCAACACAGTTAGGTGGGTCCAATGGCAACCTGAGCCCTGCCAGCACTGAAACCAATTTTTCAGAGTTGA  
AACTATGCCAAATCTCCAGCCCATCAGTGCTCTTCCAACCAAAACCCAAAAGGGAATACACAGTGGAACTGGA  
AGTGTCTCCACCCAGACTGATGGCCAACCTCCCTTTCACACCTGTGCGAGATTGGCTCCCTAAAGGAAATCACGC  
TGTCCTCTGTGAGCGAGTCCCACAGTGAGGAGACGATCCCCAGCGACAGCGGCATTGGGACAGACAACAACAGCA  
CTTCTGACCAAGCGGAGAAGAGCTCAGAATCCCGAAGGAGGTACTCTTTGATTCTGCTCCCTGGACAACCCGG  
AGGCCATTCCGTCCGACACCAGCACAAAGAACCAGGATGGCCACCGGCAAAAGCATCTCATTGTGGACAACCTTC  
TGGCCACGAAAGCCTCAAGAAGCCAAAGCACAAGAGGAAACGGAAAAGCCTGCAAAACCGCGATGACCTCCAGT  
TTCTGGCAGACCTGGAGGAGCTAATCACCAGTTTCAAGTGTTTCAAGATCTCCACCGGAGTTACACCTTCTACC  
ACGAGAATCCATATCCAGCATTTTTCGGATTAAATTTGATCACTATTACCCGGTGCCATATATCCAGTATGACC  
CGTTGCTCTATCTTCGTAGGACTTCAGACTTGAAGTCAAAGAAGAAGCGTGGTAGGCCTGCAAAAACCAATGACA  
CCATGACAAAGGTGCCCTTTTACAAAGGTTTCACTACCTATTCCCAGTGGAAGTTACTATGCACCCATGGA  
TGCCTTACACATCAATGCCTATGATGAACCTTGGTTATTACGGTCAGTACCCAGCTCCTTTGTACCTATCGCACA  
CGCTTGGAGCAGCTTCCCCATTATGAGGCCAACAGTGCCACCACCTCAGTTCCACACAAACTCCACATAAAGA  
TGTCCGGTGCAGCTAAGCATAAAGCCAAGCATGGAGTACACCTGCAGGGACCTGTTAGCATGGGCTTGGTGACA  
TGCAGCCTTCTCTGAACCTCCCAAGGTAGGCAGTGCCAGTCTGTCCAGTGGTCCGCTCCATAAGAGGAAACACA  
AACACAAGCATAAGCACAAAGGAAGACCGGATCCTAGGGACCCATGACAACTGAGTGGTCTTTTTGACAGCAAAG  
CCACAGGCTTCTCCAGCCACATCCTGAGCGAGCGGTGAGTAGCGCAGACAAAGAGCTCCCGCTGGTGGTGGAGA  
AGAACAAGCATAAGGAGAAACAGAAGCACCAGCACAGCGAAGCCGCCACAAAGCTTCTAAGAACAACCTTGGAGG  
TGGACACCTGTCTACACTGTCACTTTCCGACGCCCAGCATTGGACACAGGCCAAGGAAAAGGAGACTTGAGCA

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**FIGURE 2267B**

GTGAGCCTGTGGACTCATGCACGAAAAGATACTCTGGCAGTGGCGGGGATGGTGGCAGCACGAGATCGGAGAACC  
TGGACGTGTTTCAGTGAAATGAACCTTCGAATGACAAGTGGGACAGTGACGTGAGTGGGAGTAAAAGGAGGAGCT  
ATGAAGGCTTTGGAACGTACAGGGAAAAGGACATCCAAGCCTTCAAGATGAACCGCAAGGAGAGAAGTTCTTATG  
ACTCTCCATGTCTCCAGGGATGCCAAGTCCCCACTTAAAAGTGGACCAGACAGCAGTGCATAGTAAGAACGAAG  
GCTCAGTGCCCAACCATGATGACCAGGAAGAAGCCAGCCGAGTTGACAGTGTACAATTCCACCAGCCCCAGTGT  
TATCTCTCCTTGCTGCATCTGCAGCAACGTCGGATGCAGTCGGCTCCTCCCTGAAGAAGAGGTTCAAGCGGCGGG  
AGATCGAAGCCATCCAGTGCGAAGTGCAGAAGATGTGCACTACACCAAGATCCTGTCCACCAAGAAGAACCTGG  
ACCACGTGAACAAGATCCTGAAGGCCAAGCGGCTGCAGAGACAATCAAAAACAGGCAACAACCTTCGTGAAGAAGA  
GGCGCGGGCGTCCCAGGAAGCAGCCACCCAGTTTCGATGAGGACTCCAGAGACCAAATGCCGGTGCTGGA AAAAT  
GCATCGACCTGCCCAGCAAAAGAGGCCAGAAGCCCAGCCTGAGCCCGCTGGTGCTGGAGCCCCGCCAGCCAAAG  
ACACCATCATGGCCACCATCGAGGCGGTATCCACATGGCCCGGGAGGCGCCGCCCTGCCCGGCCACCGCCGC  
CGCCCCCTGCCGCCACCGCCGCCACCCCTGCCCGGCCACCCCTCTACCCAAGACCCCCGAGGCGGAAAGA  
GGAAACACAAACCGCAGGCCCCGCTCAGCCCCACAGCAGTCGCCCCCGCAGCAGCCCCCTTCCCAGGAAGAGG  
AGGTGAAAGCCAAAAGGCAGAGGAAGTCCCGAGGGAGTGAGAGCGAGGTCTTCCCTAGGGCGGGTCTGGGCGTC  
TGCACCTGGGGCCTAGGGAAGTACACGTGGGAAGCGCAGTGAGCCGGGGCGGGGCGGAATCCCCCGCTGCAGG  
GACACCCACGCCCTTCTCTCCAGAAGCCGGGCAGGCAGAATCCGCCAGACGACGGGGCTGAGCCATCAGGAGCT  
CTTGGGAAGCAAAGCAGGGAGACACCTTCAGAAGAAGCTTGTCTGAGCTTCACCGCAGCTCCCACCACGCGGCG  
CTTCAGTACGGCTGGATCCTCCGCAGGCGAGCGGAAGGCCCCAGGAGGAGCAGGCTGGTGGCACTCTCCTGACC  
TCACGCTGCCAAGGTGCGCCCTCGACTCCCGATTTCATTTGCTGGCCAGGAAAATCGAAAGGGAAACACCCCTCAA  
TTAGGAAACATTCCAAGGGGAGAAAAGCTGCAAATTGCTCAACTGGCATTGCTGTAACCCGTTCCATTTAATTGG  
TTTTTATTTCTTTGATTTTCAAGCTCTGCTAAGCTTTGGGGTACCAACGTCATCTTCAGGTGACCTGAATCTTT  
CCCTTAACCGTACAGTTTCTCGATGGAATTGTGTGATCAGAAGGTGGAATTCTAGTGATAGGCGACCTCAGACCC  
GCATTTCATGTTCTGTGTGCCTCTTCTATTGCACATACACTGATTTTTAGCATGTCTATTCTATTTTTCTTTG  
CCCATTGTACTTCCATATATCTTTTCATTAACTTACTTGCTGCCTTTTTTTTTCTTGGTACACATTTAAATAAA  
GTAATCCTTAACCTGTGCTGTAAAGTTCACCCCTTGGCATGCTGTTCCAAGAACCTGGGTTTGAATCCCAATCGTT  
GTGAAACATACTCAGTATTGATAAAACCTTTTTTAATAAGTGATGCAGAGCAGCCAAGGATATGTTGACCCAGATG  
TCAACCAGGCTATTTTTATACTTAAAACATGTCAGCAGAGCATAGGCAGAATAAAATGGTTTAAATACCCACAG  
CAAATAGAGTAAGTGACAAACCACCAAAAACCTGAAACCCAGACCCACCAGAAAGACAAGTGTCTAGCAATGCCT  
TGGTACCTGATCTTTTTCATTCAAATAATTGTCATAGGTTGTTT

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**FIGURE 2268**

MEPEEDELGSGRDVDSNSNADSEKWVAGDGLLEEQEFSSIKEANFTEGSLKLLKIQTTRAKKPPKNLENYICPPEI  
KITIKQSGDQKVSRAKNSKATKEEERSHSHKKLLTASDLAASDLKGFQPAAYERPQKHSTLHYDTGLPDFTGD  
TLKPKHQKSSSQNHMDWSTNSDSGPVTQNCFISPESGRETASTSKIPALEPVASFQAKQGGKSAGNTWSQLSN  
NNKDLLLGGVAPSPSSHSSPAPPSSSAECNGLQPLVDQDGGGTKEPPEPPTVGSKKKSSKKDVISQITPNPDLW  
VKNAQKAFDNTGKREGYSADSAQEASPARQNVSSASNPENDSSHVRITIPKAPSLDPTNHKRKKRQSIKAVVE  
KIMPEKALASGITMSSEVVNRILSNSEGNKKDPRVPKLSKMIENESPSVGLETGGNAEKVIPGGVSKPRKPPMVM  
TPPTCTDHSPSRKLPFIQHFKFAAKRRWTCSPKPKSTMLREAVMATSDKLMLEPPSAYPITPSSPLYTNTDSLTV  
ITPVKKRGRPKKQPLLTIVETIHEGTSTSPVSPISREFPGTKKRKRNRNLAKLAQLVPGEDKPMSEMKFHKKVKG  
LGVLDDKTIKTINKMKTILKRNILNQILSCSSSVALKAKAPPETSPGAAAIESKLGKQINVSKRGTIYIGKKRGR  
KPRAELPPPSEPKTAIKHPRPVSSQPDVPAVPSNFQSLVASSPAAMHPLSTQLGGSGNGLSPASTETNFSLEKT  
MPNLQPTISALPTKTQKGIHSGTWKLSPPRLMANSPSHLCEIGSLKEITLSPVSESHSEETIPSDSGIGTDNNSTS  
DQAEKSSSESRRRYSFDFCSLDNPEAIPSDTSTKNRHGRQKHLIVDNFLAHESLKKPKHKRKRKSLQNRDDLQFL  
ADLEELITKFQVFRISHRSYTFYHENPYPISIFRINFHYYPVPIQYDPLLYLRRTSDLKSKKKRGRPAKTNDTM  
TKVPFLQGSYPIPSGSYYPYGMPTSMPPMNLGYGQYAPPLYLSHTLGAASPFMRPTVPPPQFHTNSHIKMS  
GAAKHKAKHGVHLQGPVSMGLGDMQPSLNPPKVGSASSLSSGRLHKRKHKKHKKHKKEDRILGTHDNLGSLFAGKAT  
GFSSHILSERLSSADKELPLVSEKNKHKEKQKHQSEAGHKASKNNFEVDTLSTLSLSDAQHWTAKEKGDLSSE  
PVDSTKRYSGSGDGGSTRSENLDVFSEMNPSNDKWDSDVSGSKRRSYEGFGTYREKDIQAFKMNRKERSYDS  
SMSPGMPSPHLKVDQTAVHKNESVPTMMTRKKPAAVDSVTIPPAPVLSLLAASAATSDAVGSSLKKRFRKREI  
EAIQCEVRKMCNYTKILSTKKNLDHVNKILKAKRLQRQSKTGNNFVKRRGRPRKQPTQFDEDSRDQMPVLEKCI  
DLPSKRGQKPSLSPLVLEPAASQDTIMATIEAVIHMAREAPPLPPPPPPPLPPPPPPPLPPPPPLPKTPRGGKRK  
HKPQAPAQPPQOSPPQQPLPQEEEVKAKRQRKSRGSESEVLP

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**FIGURE 2269**

GCCGCTTTTTTTTTTCTCATCTGCCATTTGTGTGTCTTAGATGGGTTTTAATTGCATGAATGTGGCTAATGTG  
GTTCTCAGAAATTGGTCAGTATGGCCCGACATAGCTTCTGCTCTGTCTTGCTGACTCAATACCTTTAGGATTTGT  
ATCAGAGTTTGGATACTAGTGTTAGTGGTGGTGTCACTACTTAATTGGGAGATAATGAAACCAATCATGGAT  
GCTGTTTTTATTGGGCATGTCTAAGAGAGGAGAAATAGCTGGGTTTTGGGTCTAATTATGAATAAGGACTGA  
TTCAGAAAACGAGTTTATGGTAGGTAGACTAAAGTTTCACATCAGACTGTACCATTGTGATTTAGACCTATCTAA  
AATTCAGAGCATATCATCTGGGCTACCTCAGGGTCACCACCCATGTATTGGGCTTAGTCAGGATTGACAGATACA  
TTCTCAGCTGGCCTGTCATATAAAACATACTGTCATTGAGCTTAAGCTCCGCTTGTTCTGAGGTTTCACCTCCAT  
GTGTTTCATTGGTGCAAAAGTGGATCTCTTAGTTGGTCACTTAATTCTTTCTTTTTTCAGAAAGATAGTATGTTCA  
CTGGTATATTTGGTCACTCTTAGAACCTTCCTTCACATTGTTTTTTATGGGACCCATGAATGGTTAGCCTTTCTT  
TTCTATTGTAGAAGGAAATAAATAGGAGTAAAAAGACCATTGTAGTAAATAAGTTCAAGGGGAACCTGGGACCAG  
AAACCACTGTTATGTACAAAAAATGGCAAATTCATAAACTCAAATTTAAAATAATTTTTAAATTAACAGTTAT  
GATAAATTTTATATTTTATACAAATAGATTGCTTAGAATGGTTCTCAAGAATTATAAGAGAAATGAACACAGT  
ACAAAAATTTTATAATTACTATACTTGTGTTTTGTTGGGGGCTGGGAAATGTATTTTACATTGTAGCCAATCA  
TTTTATATTTGTCAATTTAAATCTTATGGGTCTTTTTTTTTTTATCTCTCTTGATGTCAGATTTTATAGTCTTTT  
TAAATAAATCCATTTAATTAAACGTTAAAAAA

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**FIGURE 2270**

MINFIFYTNRLRLRMVLKNYKRNELTVQKFYNYITCVLFGGWEMYFYIVANHFIFVNLNLMGLFFFISLDVRFYSL  
FK

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**FIGURE 2271**

GATTTTAGAAGAAAACCCCTTTTGTCAACAATTTTGTGTACATATTTGGCATTTCAGTTCTGTACGCATCTGCGG  
GTTGCAGCCCACGCCGCTTACTCTCAGCGGATGCAGCTGCTCACTTGGGGGCACTGGCCTCTTAGGTTTTAACGA  
TGTC AACAGTGTAGTTTAGAAAATGGCCGTTAGTGGCTCTATTGCAATAATGTTAGGGACATTATATGATTTC  
ACGCAGGTACACCATCTGGGCCTGAGGTAGCAGTGGGTCACTTTGATCCACTTTGCAGGACTTATTCTGTAACG  
GTTTGTGGCCAAGTTTTGGGAAGTGGTTGATTCTCTTTGCCTTCATTTACCTTCCTCTTCGTTTACGGTTAGGA  
CATCGCTGCTTGATCCTTACAATACTGTGCAACTGCAATGCAACGTGGCCCTGCTTCAGGTGATCCGCGGGAGGG  
GCCTCCACGCCAGCGCCGGGAAGGCTGCTGGGGCCTCCACACCTGCCTCATCACGGCGGGAGGCTACGACAATC  
CGGCTGGGAGCATGACCTTGGCGTCTGTTCTGGGAGCACGGATGATAAGCTCTGGAAGCTGGCAGTGTGTAAAGC  
ACTGGCAAGTTTGTACTGTTAAAATGTCAAAATACCAATGCTTTATATCGACGCGAAGTGCTTAACACAGCCGGG  
CTTGGGGGCACTCAGGAGGAAGCTGGCCATCCGTGGAGGAGGGCCGGTCTGGACTCCCGCAGGACTCCTCTGA  
GGCAGGGCCTGAAGTCTGTACACGTGGTCCAGATTTGTCTTGTCTTTTCTTCACACTGAGTCTCTATATTTAT  
TGAACATCTTGTCTTTTAAAGCCAGAGTAGTGTAAACTGCGTCTCGGATGTCTGTCTTTTGCCTCGAAGCCACGA  
TGGATCGCTGGTTTCTCTGCAGCGCGAGGGCTCCGGCGACCAGAGGATTCTTCCCGGAAGGCATTCTTGCCCGG  
CTCCCCGGGGCACCCCTCAATTGTGTACTACGTCCTTGTGTTAGTGTGTATCCGTGCCACGTAGATGATGTCTGT  
AACGTAGTTTGTGTTGAAATATGAGAATATGCGGCTTAAACTTTGATCTGTAAGGAGCGGGGCGGTGGCCGTTT  
GAGCACGCTGTAGACACCGTTCCTCATGCTGCCGGGTGGGTTTTGCAGAAGCTCCCTTAGTGATTTTCATGTTTAA  
CAGGCAGCATCCATTTCCAGAAATTCCTGGCATTGATTTATATTTGAAGCATACAGGAACTTCTCGTTTCCCTC  
GTTTAGCCCCACCCAGATCAGGTGAAAGGGCAGCTTTAATGGTGGTTTTTATGGACCACATTATCAGAGAGCACT  
GTGCAAGCCAAATGGTTCAATAATGAATGAAATTTCTGGGTGTAAAGAGTAAATATGCCCTGGCTCTTTCTACCA  
ATGTTTGTCTCCTGGTTGGAAAGAAACCAAGATTAAAGACGGGCTGCTCTTCCAGACTGGCTGTGCCTGCCTGTG  
CCCAGCAACCTGTGCAGCCGGCAGTGTGCCTGGTGTACGCCAGGAGGCTGTGGCTGCTGTGGCCCTCTGGAAT  
TGTGCTCCTCACAAGTTTCCCCAAAAGGTTCTTCTAAGCCTTTATTGTCCCTGGTAAATGTTTCCCGGCTGGGC  
GCGGTGGCTCACGCTGTAAATCCCAGCACTTTGGGAGGCCGAGGCGGGTGGATCACCTAAGGTCAGGAGTTTGAG  
ATCAGCCTGCCCAACATGGTGAAACCTCGTCTCTACTAAAAATACACAACCTTAGCCAGTCTTGTGGCGCACGCC  
TGTAATCTCAGCTACTAGGGATGCTGAGGCAGGAGAATCGCTTGAACCCAAGAAAGAGGTGGAGGTTGCGGTGAG  
CCAAGATTGCGCCACTGCACTCCAGCCTGGGCAACAGAGGGAGACTCCATCGCCCCCCCCCAACAAAAAAAAG  
TTTCCCATACACTGGCCTGCCCCAAAACCCACTAACAAATTTTAGCAAAACAGTCCAGGCCAAAGAGGAAGCATT  
CATGTTCAATAAGAAAACCCAGCCATTCCGCATGGCTGGTTCCTGAGTGGCTCTGGTGATACTCTCCAGCCACCTG  
CTGACATTAGAAATCTCAGACCTCGGGACTGCTGTTGCGGTACCGTGTGTCTGACACCTGCCAGCAGCCCTTTGC  
TATCTGCGCGCAGGATGGGGGTGACTGCCCAGACATTCCCGCTAGATAGGCTCTGATTCCGGGGCAGCCTTTCA  
GATGCGGCAGACATACAACACCTGTACTTTAGAGTTTAAAGGGAAAAAAATCAGAAGTGCTGGTTAGATAGTAA  
AACTTAGGATAACTTAGAAAGGCTAGTTTTAGCTTCTTTGTGGCTCCCTGGTGCAAAACAATTAGCAGTTATG  
CAATGGACCTGATTCTAGTTTATTCTAATTAAGAAGTGAGGCCGAGTTTGACTTCGTTCTCTGAATACAATCTTGA  
GTAATGGGAAAGTCTGAGTGAAAGGATGGCCTCATTCTCTTTCTAATCTTGCTGGTTCAAGATTAGAAAATGG  
CATTATTTGATCTGAAATGTTTGAGAAGACACGAATAAAGTTACTTGGGCAGAAAAAAA

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**FIGURE 2272**

MQRGPASGDPREGPPRQRREGCWGLHTCLITAARLRQSGWEHDLGVCSGSTDDKLWKLAVCKALASLLLLKCQIP  
MLYIDAKCLTQPGLGAVRRKLAIRGGGAGPGLPQDSSEAGPEVCTRGPDLSSLFLHTEFSIFIEHLVLLSQSSVN  
CVSDVCLLPRSHDGLVSSAARGLRPEDSSRKAFLPRSPGHPSIVYYVLV

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**FIGURE 2273**

GCCGGCATTCAATTTAAGGCCTAAGGATGAAGGCGAGAAGAAATAAAAAACAGATCCCAAGCTTTCGCAAGTTAAT  
AAAAACTAGTAAAGTCAAACCTTGAAAACAAGCTAAAAAATAAGCAGTTTAAACAACAAAGCACTCTCAAGAAGTA  
CCGAAAAGAACAGAGGAACTAAGGCAAGCTGTGAAAGATGCTGTGTCTAAGAAACCCATTCCATTGGAGAACCC  
AAAGGAAAAGCGACCAGGTAAAAGGATTGAGAGGGAAGAAGAGGAAGAAGAAGGCCCTTCCTTTAGATATGAT  
GGATGAAGATGACTTACAGTTAATGAAGGATTTAGGACAAAGAGTATCTTTTCTACAAGAGATCTTCTTCTAG  
TGAGCCTGTTTCATGCGAAGAAACGGAAGCATGAACGCATTATAGATAAAATATGAAAAATACCAAGAAGCTCTGCA  
AACTGCACCAGAGAAGGAAGTATTCATTTACTTCTATCAAAGATAAAAGTGGTATAATCCACAGACTAGGGA  
GAAGCCAGTTACTGATAGTAACAAAGATGAAGAGGATCAAGAAGAAGAGAGGGAAGCTTGAGGAAGAGATCATTGA  
AGATCCTATTCAAGAGCTGACCATAGAAGAACATTTGATTGAGAGAAAGAAGAAATTACAGGAGAAGAAGATGCA  
TATTGCAGCCTTGGCATCTGCCATATTATCAGATCCAGAAAATAATATTAAAAATGAAAGAATTACGTTCTAT  
GTTGATGGAACAAGATCCTGATGTGGCTGTTACTGTTGCAAGCTGGTAATTGTTTCTCTGATGGAGTTATTTAA  
AGATATTACTCCTTCATATAAAATCCGGCCCCTCACAGAAGCAGAAAAATCTACTAAGACCCGAAAAGAAACCCA  
GAAGTTAAGAGAATTTGAAGAAGGCCTGGTTAGCCAATACAAGTTTTATTTGGAAAATCTGGAACAAATGGTTAA  
AGATTGGAAGCAGAGGAAGCTGAAGAAAAGTAATGTAGTTTCCTTAAAGGCATACAAAGGACTGGCAGAAGTCGC  
TGTGAAGAGCTTGTGTGAGCTGTTGGTGGCACTACCTCATTTTAACTTTACAACAACATCATCGTATTGATTGT  
CCCTCTCATGAATGACATGTCAAAATTGATATCTGAAATGTGTTGTGAAGCTGTGAAGAACTCTTTAAGCAAGA  
TAAATTAGGCCAGGCTTCTCTTGGTGAATTAAGTGATTTCTGGTTTTGTGAAGGCAGAAATTACGAAGTTAG  
GCCAGAGATGTTAAAAACATTTTTATGCCTAAGAATCAAGGAAGTAGAAGTGAAAAAGATACAGAAGACATTAA  
TAAACCAAAAAATTTATGACTTTCAAAGAAAAGAGAAAATCTCTATCAAGAATGCAGAGAAAGTGGAGAAAGC  
AGAAGAGAACTAGAGCGAGAGCTTCGAGAGGCAGAGCTTCAGAGAGTACTGAGAAAAAACTTAACTGCACAC  
AGAGACTCTGAATATTGTGTTTTGTAACCTACTTCAGAATATTGAAGAAGGCCAGAGGTACCTCTCCTGCCAGC  
AGTTCTAGAAGGTCTTGCCAAGTTTGCTCACCTTATAAATGTGGAATTTTTTGATGATCTGTTAGTAGTTCTTCA  
TACTCTCATTGAGTCTGGTGACCTAAGCTATCAAGAAAGTCTTCACTGTGTCCAGACTGCTTTTCATATTCTTTC  
TGGACAAGGTGATGTTCTGAATATTGATCCATTGAAATTCTACACACATCTCTACAAAACACTGTTCAAATTACA  
TGCAGGTGCTACCAATGAAGGTGTTGAGATTGTACTCCAGTGCCTTGATGTCTAGCTAACTAAGCGCAGAAAGCA  
AGTTTCTCAGCAGCGAGCTCTTGCCCTTCATCAAACGCCCTTGTACCCCTGCTCTTCATGTTCTTCCAAATCAAG  
TATTGGCATTTTAGCAACTACCAGAATATTAATGCATACTTTCCCCAAAACAGATCTACTGCTTGACAGTGAATC  
TCAGGGAAGTGGAGTTTTCTTCCGAACTGGATGAGCCTGAGTACTGCAATGCTCAGAACACTGCTCTGTGGGA  
ACTGCATGCTCTGCGGAGGCATTATCATCCCATAGTGCAGAGATTGCGAGCCACCTGATCGCTGGAGCACCTTC  
TGAAGGCTCTGGAGCACTCAAACCAGAGTTGAGTCAAGATCTGCTACTGAACTTTTTGAGGCATATAGCATGGC  
AGAAATGACATTCAATCCTCCTGTTGAATCTTCAAACCCCAAAATAAAGGGTAAATTTTTACAAGGGGATTCATT  
TTTGAATGAAGATTTAAATCAGCTAATCAAAGATACTCCAGTGAAGTTGCTACTGAATCGCCTCTGGATTTCAC  
GAAATATTTGAAAACATCACTACACTAGTAGAGGAATGAAGTCAGTGGAC



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**FIGURE 2274**

MKARRNKKQIPSFRLIKTSKVKLENKLNKQFKQQSTLKKYRKEQRKLRQAVKDAVSKKPIPLENPKEKRPGR  
IEREEEEEEALPLDMMDEDDLQLMKDLGQRVSLTRDLSSEPVAHAKKRKHERIIDKYEKIPRTLQTAPEKELI  
HLLPIKDKSGIIPQTREKPVTD SNKDEEDQEEERELEEEI IEDPIQELTIEEHLIERKKKLQEKMHIAALASAI  
LSDPENNIKKLKELRSMLEQDPDVAVTVRKLVIVSLMELFKDITPSYKIRPLTEAEKSTKTRKETQKLREFEEG  
LVSQYKFYLENLEQMVKDWKQKRLKKSNNVSLKAYKGLAEVAVKSLCELLVALPHFNFHNNIIVLIVPLMNDMSK  
LISEMCCEAVKKLQDKLGQASLGVIKVISGFVKGRNYEVRPEMLKTFCLRIKEVEVKKDTEDINKPKKFTF  
KEKRKSLSRMQRKWKKAEEKLERELREAEASESTEKKLKLHTETLNIVFVITYFRILKKAQRSPLLPAVLEGLAKF  
AHLINVEFFD DLLVLHTLIESGDL SYQESLHCVQTAFHILSGQGDVLNIDPLKFYTHLYKTLFKLHAGATNEGV  
EIVLQCLDVMLTKRRKQVSQQRALAFIKRLCTLALHVLNPNSSIGILATTRILMHTFPKTDLLDSESQSGVFLP  
ELDEPEYCNAQNTALWELHALRRHYHPVQRFAAHLIAGAPSESGALKPELSRRSATELFEAYSMAEMTFNPPV  
ESSNPKIKGKFLQGDSFLNEDLNQLIKRYSSEVATESPLDFTKYLKTS LH

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**FIGURE 2275**

ATGGCAGCCCGTCTGCTCCTCCTGGGCATCCTTCTCCTGCTGCTGCCCCTGCCCGTCCCTGCCCCGTGCCACACA  
GCCGCACGCTCAGAGTGCAAGCGCAGCCACAAGTTTCGTGCCTGGTGCATGGCTGGCCGGGGAGGGTGTGGACGTG  
ACCAGCCTCCGCCGCTCGGGCTCCTTCCCAGTGGACACACAAAGGTTCTGCGGCCGACGGCACCTGCACCCTC  
TGTGAAAATGCCCTACAGGAGGGCACCTCCAGCGCCTGCCTCTGGCGCTCACCAACTGGCGGGCCAGGGCTCT  
GGCTGCCAGCGCCATGTAACCAGGGCCAAAGTCAGCTCCACTGAAGCTGTGGCCGGGATGCGGCTCGTAGCATC  
CGCAACGACTGGAAGGTCGGGCTGGACGTGACTCCTAAGCCCACCAGCAATGTGCATGTGTCTGTGGCCGGCTCA  
CACTCACAGGCAGCCAACTTTGCAGCCCAGAAGACCCACCAGGACCAGTACAGCTTCAGCACTGACACGGTGGAG  
TGCCGCTTCTACAGTTTCCATGTGGTACACACTCCCCGCTGCACCCTGACTTCAAGAGGGCCCTCGGGACCTG  
CCCCACCACTTCAACGCCTCCACCCAGCCCGCTACCTCAGGCTTATCTCCAACCTACGGCACCCACTTCATCCGG  
GCTGTGGAGCTGGGTGGCCGCATATCGGCCCTCACTGCCCTGCGCACCTGCGAGCTGGCCCTGGAAGGGCTCACG  
GACAACGAGGTGGAGGACTGCCTGACTGTCGAGGCCCAGGTCAACATAGGCATCCACGGCAGCATCTCTGCCGAA  
GCCAAGGCCTGTGAGGAGAAGAAGAAGAAGCACAAGATGACGGCCTCCTTCCACCAAACCTACCGGGAGCGCCAC  
TCGGAAGTGTTGGCGGCCATCACACCTCCATTAACGACCTGCTGTTTCGGGATCCAGGCCGGGCCCCGAGCAGTAC  
TCAGCCTGGGTAAACTCCGTGCCCCGGCAGCCCTGGCCTGGTGGACTACACCCTGGAACCCCTGCACGTGCTGCTG  
GACAGCCAGGACCCGCGCGGGAGGCACTGAGGAGGGCCCTGAGTCAGTACCTGACGGACAGGGCTCGCTGGAGG  
GACTGCAGCCGGCCGTGCCACCAGGGCGGCAGAAGAGCCCCGAGACCCATGCCAGTGTGTGTGCCATGGCTCA  
GCGGTACCAACCCAGGACTGCTGCCCTCGGCAGAGGGGCTGGCCAGCTGGAGGTGACCTTCATCCAAGCATGG  
AGCCTGTGGGGGGACTGGTTCACTGCCACGGATGCCTATGTGAAGCTCTTCTTTGGTGGCCAGGAGCTGAGGACG  
AGCACCGTGTGGGACAATAACAACCCCATCTGGTCAGTGCAGCTGGATTTTGGGGATGTGCTCCTGGCCACAGGG  
GGGCCCCGTGAGGTTGCAGGTCTGGGATCAGGACTCTGGCAGGGACGATGACCTCCTTGGCACCTGTGATCAGGCT  
CCCCAAGTCTGGTTCCCATGAGGTGAGATGCAACCTGAATCATGGCCACCTAAAAATCCGCTATCATGCCAGGTGC  
TTGCCCCACCTGGGAGGAGGCACCTGCCTGGACTATGTCCCCCAAATGCTTCTGGGGGAGCCTCCAGGAAACCGG  
AGTGGGGCCGTGTGGTGA

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**FIGURE 2276**

MAARLLLLGILLLLLPLPVPAPCHTAARSECKRSHKFVPGAWLAGEGVDVTSLRRSGSFPVDTQRFLRPDGTCTL  
CENALQEGTLQRLPLALTNWRAQGGCQRHVTRAKVSSTEAVARDAARSIRNDWKVGLDVTPKPTSNVHVSVAGS  
HSQAANFAAQKTHQDQYSFSTDIVECRFYSFHVHTPPLHPDFKRALGDLPHHFNASTQPAYLRLISNYGTHFIR  
AVELGGGRISALTALRTCELALEGLTDNEVEDCLTVEAQVNIGIHGSI SAEAKACEEKKKKHKMTASFHQTYRERH  
SEVVGGHHTSINDLLFGIQAGPEQYSAWVNSVPGSPGLVDYTTLEPLHVLLDSQDPRREALRRALSQYLTDRARWR  
DCSRPCPPGRQKSPRDPCQCVCHGSAVTTQDCCPRQRGLAQLEVTFIQAWSLWGDWFTATDAYVKLFFGGQELRT  
STVWDNNNP IWSVRLDFGDVLLATGGPLRLQVWDQDSGRDDDLLGTCDQAPKSGSHEVRCNLNHGHLKFRYHARC  
LPHLGGGTCLDYVPQMLLGEPPGNRSGAVW

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**FIGURE 2277**

CCAGATCTCAGAGGAGCCTGGCTAAGCAAAACCCTGCAGAACGGCTGCCTAATTTACAGCAACCATGAGTACAAA  
TGGTGATGATCATCAGGTCAAGGATAGTCTGGAGCAATTGAGATGTCACCTTTACATGGGAGTTATCCATTGATGA  
CGATGAAATGCCTGATTTAGAAAACAGAGTCTTGGATCAGATTGAATTCCTAGACACCAAATACAGTGTGGGAAT  
ACACAACCTACTAGCCTATGTGAAACACCTGAAAGGCCAGAATGAGGAAGCCCTGAAGAGCTTAAAGAAGCTGA  
AAACTTAATGCAGGAAGAACATGACAACCAAGCAAATGTGAGGAGTCTGGTGACCTGGGGCAACTTTGCCTGGAT  
GTATTACCACATGGGCAGACTGGCAGAAGCCCAGACTTACCTGGACAAGGTGGAGAACATTTGCAAGAAGCTTTC  
AAATCCCTTCCGTATAGAATGGAGTGTCCAGAAATAGACTGTGAGGAAGGATGGGCCTTGCTGAAGTGTGGAGG  
AAAGAATTATGAACGGGCCAAGGCCTGCTTTGAAAAGGTGCTTGAAGTGGACCCTGAAAACCCTGAATCCAGCGC  
TGGGTATGCGATCTCTGCCTATCGCCTGGATGGCTTTAAATTAGCCACAAAAATCACAAGCCATTTCTTTTGCT  
TCCCCTAAGGCAGGCTGTCCGCTTAAATCCAGACAATGGATATATTAAGGTTCTCCTTGCCCTGAAGCTTCAGGA  
TGAAGGACAGGAAGCTGAAGGAGAAAAAGTACATTGAAGAAGCTCTAGCCAACATGTCTTCACAGACCTATGTCTT  
TCGATATGCAGCCAAGTTTTACCGAAGAAAAGGCTCTGTGGATAAAGCTCTTGAGTTATTAATAAAGGCCCTTGCA  
GGAAACACCCACTTCTGTCTTACTGCATCACCAGATAGGGCTTTGCTACAAGGCACAAATGATCCAAATCAAGGA  
GGCTACAAAAGGGCAGCCTAGAGGGCAGAACAGAGAAAAGCTAGACAAAATGATAAGATCAGCCATATTTCAATT  
TGAATCTGCAGTGGAAAAAAGCCACATTTGAGGTGGCTCATCTAGACCTGGCAAGAATGTATATAGAAGCAGG  
CAATCACAGAAAAGCTGAAGAGAATTTCAAAAATTGTTATGCATGAAACCAGTGGTAGAAGAAACAATGCAAGA  
CATACATTTCTACTATGGTCGGTTTTAGGAATTTCAAAAGAAATCTGACGTCAATGCAATTATCCATTATTTAAA  
AGCTATAAAAATAGAACAGGCATCATTAAACAAGGGATAAAAGTATCAATTCTTTGAAGAAATTGGTTTTAAGGAA  
ACTTCGGAGAAAGGCATTAGATCTGGAAAGCTTGAGCCTCCTTGGGTTTCGTCTATAAATTGGAAGGAAATATGAA  
TGAAGCCCTGGAGTACTATGAGCGGGCCCTGAGACTGGCTGCTGACTTTGAGAACTCTGTGAGACAAGGTCCTTA  
GGCACCCAGATATCAGCCACTTTACATTTCAATTTATGCTAACATTTACTAATCATCTTTCTGCTTAC  
TGTTTTCAGAAACATTATAATTCACTGTAATGATGTAATTCTTGAATAATAAATCTGACAAAATATT

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**FIGURE 2278**

MSTNGDDHQVKDSLEQLRCHFTWELSIDDDEMPDLENRVLDQIEFLDTKYSVGIHNLLAYVKHLKGQNEEALKSL  
KEAENLMQEEHDNQANVRSLVTWGNFAWYYHMGRLAEAQTYLDKVENICKLSNPFRYRMECPEIDCEEGWALL  
KCGGKNYERAKACFEKVLEVDPENPESSAGYAISAYRLDGFKLATKNHKPFSLPLRQAVRLNPDNGYIKVLLAL  
KLQDEGQEAEGEKYIEEALANMSSQTYVFRYAAKFYRRKGSVDKALELLKKALQETPTSVLLHHQIGLCYKAQMI  
QIKEATKGQPRGQNREKLDKMIRSAIFHFESAVEKKPTFEVAHLDLARMYIEAGNHRKAEENFQKLLCMKPVVEE  
TMQDIHFYYGRFQEFQKKSVDNIIHYLKAIEQASLTRDKSINSLKKLVLRKLRRKALDLESLSLLGFVYKLE  
GNMNEALEYYERALRLAADFENSVRQGP

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**FIGURE 2279**

CGGCTGAGAGGCAGCGAACTCATCTTTGCCAGTACAGGAGCTTGTGCCGTGGCCACAGCCCACAGCCCACAGCC  
ATGGGCTGGGACCTGACGGTGAAGATGCTGGCGGGCAACGAATTCCAGGTGTCCCTGAGCAGCTCCATGTCGGTG  
TCAGAGCTGAAGGCGCAGATCAGCCAGAAGATTGGCGTGACGCCTTCCAGCAGCGTCTGGCTGTCCACCCGAGC  
GGTGTGGCGCTGCAGGACAGGGTCCCCCTTGCCAGCCAGGGCCTGGGCCCTGGCAGCACGGTCCTGCTGGTGGTG  
GACAAATGCGACGAACCTCTGAGCATCCTGGTGAGGAATAACAAGGGCCGCAGCAGCACCTACGAGGTCCGGCTG  
ACGCAGACCGTGGCCACCTGAAGCAGCAAGTGAGCGGGCTGGAGGGTGTGCAGGACGACCTGTTCTGGCTGACC  
TTCGAGGGGAAGCCCCTGGAGGACCAGCTCCCGCTGGGGGAGTACGGCCTCAAGCCCCTGAGCACCGTGTTTCATG  
AATCTGCGCCTGCGGGGAGGCGGCACAGAGCCTGGCGGGCGGAGCTTAAGGGCCTCCACCAGCATCCGAGCAGGAT  
CAAGGGCCGGAATAAAGGCTGTTGTAAGAGAAAT

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**FIGURE 2280**

MGWDLTVKMLAGNEFQVSLSSSMSVSELKAQITQKIGVHAFQORLAVHPSGVALQDRVPLASQGLGPGSTVLLVV  
DKCDEPLSILVRNNKGRSSTYEVRLTQTV AHLKQOVSGLEGVQDDLFWLT FEGKPLEDQLPLGEYGLKPLSTVFM  
NLR LRGGGTEPGGRS

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**FIGURE 2281**

ATGTCGGATTTCGGAGGAGGAGAGCCAGGACCGGCAACTGAAAATCGTCGTGCTGGGGGACGGCACCTCCGGGAAG  
ACCTCCTTAACCTACGTGTTTTGCTCAAGAACTTTTGGGAAACAGTACAAACAACTATAGGACTGGATTTCCTT  
TTGAGAAGGATAACATTGCCAGGAACTTGAATGTTACCCCTTCAAATTTGGGATATAGGAGGGCAGACAATAGGA  
GGCAAAATGTTGGATAAATATATCTATGGAGCACAGGGAGTCTCTTGGTATATGATATTACAAATTATCAAAGC  
TTTGAGAATTTAGAAGATTGGTATACTGTGGTGAAGAAAGTGAGCGAGGAGTCAGAACTCAGCCACTGGTTGCC  
TTGGTAGGCAATAAAATTGATTTGGAGCATATGCGAACAATAAAACCTGAAAAACACTTACGGTTTTGCCAGGAA  
AATGGTTTTAGTAGCCACTTTGTCTCAGCCAAGACAGGAGACTCTGTCTTCCTGTGCTTTCAGAAAGTTGCTGCT  
GAAATCCTTGGGATCAAATTAACAAAGCAGAAATAGAACAGTCACAGCGTATTGTCAGGGCAGAAATAGTGAAG  
TACCCGGAAGAAGAAAATCAACATACCACCTCTACTCAGAGTAGAATCTGTTCAGTACAGTAGTGCAGAGGGTGG  
TGAAGGCAGATATTGTAAACTACAACCAGGAACCTATGTCAAGGACTGTTAACCTCCTAGAAGCTCTATGTGTG  
CAGTTCAGTGAGCGCATTTTTCC



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**FIGURE 2282**

MSDSEEEESQDRQLKIVVLGDGTSGKTSLTTCFAQETFGKQYKQTIGLDFFLRITLPGNLNVTLQIWDIGGQTIG  
GKMLDKYIYGAQGVLLVYDITNYQSFENLEDWYTVVKKVSESESTQPLVALVGNKIDLEHMRITIKPEKHLRFCE  
NGFSSHVFSAKTGDSVFLCFQKVAEILGIKLNKAEIEQSQRIVRAEIVKYPEEENQHTTSTQSRICSVQ

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**FIGURE 2283**

CGGGGGTTTTGATCTTCTTCCCCTTCTTTTCTTCCCCTTCTTCTTCTTCCCTCCCTCCCTCTCTCAATTCCTT  
CTCCTTCTCCCTCAGTCTCCACATTCAACATTGACAAGTCCATTGAGAAAAGCAAGCTGCTTCTGGTTGGGCCCCA  
GACCTGCCTTGAGGAGCCTGTAGAGTTAAAAAATGAACCCACGGATATAGCAGATACCACCCTCGATGAAAGCA  
TATACAGCAATTACTATCTGTATGAAAGTATCCCCAAGCCTTGACCAAAGAAGGCATCAAGGCATTGGGGAGC  
TCTTCTGCCCCACTGTATTCTTGGTTTTTGTATTGGTCTGCTTGAAATTCTGTGGTGGTCTGGTCTCTGT  
TCAAATACAAGCGGCTCAGGTCCATGACTGATGTGTACCTGCTCAACCTTGCCATCTCGGATCTGCTCTTCGTGT  
TTCCCTCCCTTTTTGGGGCTACTATGCAGCAGACCAGTGGGTTTTTGGGCTAGGTCTGTGCAAGATGATTCCT  
GGATGTACTTGGTGGGCTTTTACAGTGGCATATTCTTTGTTCATGCTCATGAGCATTGATAGATACCTGGCGATAG  
TGCACGCGGTGTTTTCTTGAGGGCAAGGACCTTGACTTATGGGGTCATCACCAGTTTGGCTACATGGTCAGTGG  
CTGTGTTGCGCTCCCTTCTTGGCTTTCTGTTCAGCACTTGTTATACTGAGCGCAACCATACCTACTGCAAAACCA  
AGTACTCTCTCAACTCCAGCAGCTGGAAGGTTCTCAGCTCCCTGGAAATCAACATTCTCGGATTGGTGATCCCTT  
TAGGGATCATGCTGTTTTGCTACTCCATGATCATCAGGACCTTGACGATTGTAAAAATGAGAAGAAGACAAGG  
CGGTGAAGATGATCTTTGCCGTGGTGGTCTCTTCTTGGGTTCTGGACACCTTACAACATAGTGCTCTTCTCTAG  
AGACCCTGGTGGAGCTAGAAGTCCTTCAGGACTGCACCTTTGAAAGATACTTGGACTATGCCATCCAGGCCACAG  
AACTCTGGCTTTTTGTTCACTGCTGCCTTAATCCCATCATCTACTTTTTTCTGGGGGAGAAATTCGCAAGTACA  
TCCTACAGCTCTTCAAAACCTGCAGGGGCTTTTTTGTGCTCTGCCAATACGTGGGCTCCTCCAAATTTACTCTG  
CTGACACCCCCAGCTCATCTTACACGCAGTCCACCATGGATCATGATCTTCATGATGCTCTGTAGGAAAAATGAA  
ATGGTGAAATGCAGAGTCAATGAACTTTTCCACATTCAGAGCTTACTTTAAATTTGGTATTTTAGGTAAGAGAT  
CCCTGAGCCAGTGTGAGGAGGAAGGCTTACACCCACAGTGGAAAGACAGCTTCTCATCCTGCAGGCAGCTTTTCT  
TCTCCCACTAGACAAGTCCAGCCTGGCAAGGGTTACCTGGGCTGAGGCATCCTTCTCACCAGGCTTGCTG  
CAGGCATGAGTCAGTCTGATGAGAACTCTGAGCAGTGCTTGAATGAAGTTGTAGGTAATATTGCAAGGCAAGAC  
TATTCCCTTCTAACCTGAAGTATGGGTTTCTCCAGAGGGAATTGCAGAGTACTGGCTGATGGAGTAAATCGCTA  
CCTTTTGTGTGGCAAATGGGCCCCCG

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**FIGURE 2284**

MNPTDIADTTLDESIYSNYLYESIPKPKCTKEGIKAFGELFLPPLYSLVFVFGLLGNSVVVLVLFKYKRLRSMTD  
VYLLNLAISDLLFVFSLPFWGYAADQWVFGGLCKMISWMYLVGFYSGIFFVMLMSIDRYLAIVHAVFSLRART  
LTYGVITSLATWSVAVFASLPGLFSTCYTERNHTYCKTKYSLNSTTWKVLSSLEINILGLVIPLGIMLFCYSMI  
IRTLQHCKNEKKNKAVKMIFAVVVLFLGFWTPYNIVLFLETLEVLQDCTFERYLDYAIQATETLAFVHCCLN  
PIIYFFLGEKFRKYILQLFKTCRGLFVLCQYCGLLQIYSADTPSSSYTQSTMDHDLHDAL

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**FIGURE 2285**

AGGCGCTAGAGCGGGGGCGCCGGGAGGCGGGGCTTTGCTCCTGGGGTCTCGGCCTTGGCCGGCTGGACCTGAC  
CCTAGGGCGGCTTGCAGCTGTGCGGACGTGACTGCGTTACGCCGCGTCGGGCGTGCTTCCCAGACTTGCCCAA  
GTTCCGGGTGCCCTAGCTGCCCCCTTTCAGCCGCTGGCCTACCCGGCCCGGGGTGAGAAGGTTGCGACGGGAGGT  
GGGTGGAAGTTCGCCAGCGCCGGGACCGCGGATTGGCTGCCTCGGCTTTCTCTTTTCCCGTGGGCTCCGGCGTGA  
GGCGCTGAAGCGGCCGGCAGCCGGCGACCGGCCCTACCGTCCGCGGGTTGCGCTCTGCTTTTGCGGTGAGGCG  
TTGACCACGCCCATATGAATTGGAGCTCTCCGCCAGTAGGAGTTTCCGGAAGGAGTTTGAATTTTGTGATTTT  
ATGCTTGTGTTGGTCGGTGGAAATATGTTGGGATTTATGTTTGCTCTGAACAAGTGTCTTGCTCACATCGTAAATG  
ACTTTCTCTCCGAAACGCTAAATATTCTTTCCCGCAGGAGCTCATATCCTTATTTTCCATGACAGATCTTAACGA  
CAATATATGCAAAAGATATATAAAGATGATAACTAATATAGTTATACTGAGCCTGATCATTGCAATTCGTTAGC  
TTTCTGGATTATATCAATGACTGCAAGCACCTATTATGGTAACTTACGACCTATTTCTCCGTGGCGTTGGCTGTT  
TTCTGTTGTTGTTCTGTTCTGATCGTCTCTAATGGCCTTAAAAAGAAAAGTCTAGATCACAGTGGGGCTCTAGG  
AGGGCTAGTCGTTGGATTTATCCTAACCATTGCAAATTTTACGCTTTTTTACCTCTTTGCTGATGTTTTCTTGTG  
TTCTTCGAAACTCACTAAATGGAAGGGAGAAGTGAAGAAGCGTCTAGATTCAGAATATAAGGAAGGTGGGCAAG  
GAATTGGGTTTCAAGTGTCTGTAATGGAGCTGTACCCACAGAAGTGGCCCTGCTGTACATGATAGAAAATGGCCC  
CGGGGAAATCCAGTGCATTTTCCAAGCAGTACTCCGCTTCTGGATGTGTTGTCTCTCTTGGCTGCACTGGC  
CTGCTCTGCTGGAGACACATGGGCTTCAGAAGTTGGCCAGTCTGAGTAAAAGTCTCCAAGACTGATAACAAC  
CTGGGAGAAAGTTCCAGTTGGTACCAATGGAGGAGTTACAGTGGTGGGCCTTGTCTCCAGTCTCCTTGGTGGTAC  
CTTTGTGGGCATTGCATACTTCTCACACAGCTGATTTTTGTGAATGATTTAGACATTTCTGCCCCGAGTGGCC  
AATTATTGCATTGGTGGTTTAGCTGGATTACTAGGATCAATTGTGGACTCATACTTAGGGGCTACAATGCAGTA  
TACTGGGTTGGATGAAAGCACTGGCATGGTGGTCAACAGCCCAACAATAAGGAAGGCACATAGCAGGGAAACC  
CATTCTTGATAACAACGCAGTGAATCTGTTTTCTCTGTTCTTATTGCCCTCTGCTCCCAACTGCTGCTTGGGG  
TTTTTGCCCGAGGGGTGAAGTCTTATTTTCACTTCCACAGGTTGAAACTGGTGGTGGTCCAGCTAAATTTGCAATTC  
AACTTTTATCTTAAGAATAAATACTGTAATGGCAAAGCGGAAATGCCAGTTCCTCTGTATTCCATTGAGATGGG  
ATTTACATTTTCTCTCATCACTCCCTGTATAGCTAGCGTCTTTCTAGTGAAAGAGAAGAAATTCCTAGAAC  
TTATGCATTTTTTCTCTGCTGAATGGAAGTCTTGAGCAATGAAGCTATATTGTCCCTACATATTACTATATATTG  
AACTGAAAGTCTTACATAATCAATGTCAAGTTTGTCTTATTTGTTTTGTTTTGTTTTAAACCAGTGTAGGAAAT  
AAAAGTGATGATATTTAAATAGTTCTCAGTTGAAGCAGAGAAATGCCACTGTGCTAGTTGCCCAATGTTGTAT  
CTATTTTAAATAGTTTAAAGCTGATGTGTATGGGAGCCTAAACAAGTGTAGTATCCTGAAGTCTCTCCCATTAATTG  
CTATTACAAATTGGGAAAAGTGTGGAGATTGGTTCTTAGTGAGTTTTGTGGCCTACTCCACATTTGTTCTTCTCT  
CCTCAGGGTTAGTGATGAAAAAAGTAAATATCTTTTCTATGTCCATTAGAAATGTATGAAAAAATCATTTTA  
ACTAAAAGCAAAAGAAATTTATCTTATATCTAAAAAATATATAACTTACTATATGTTTCAGTTGCTCTCTGAACA  
AAAATTATCTTCAATTTAATATGTGGAATGTGTTTTCTAGCTTTCTTTGAATTATGTATGGCAACCTGGTTTAGC  
ACTGGCATCCTGAACAGTTAAGAGTCACTGGGAAATATTGTATTCTTTTATAAATTTACTGTATATCAATTGC  
TGGAAAATGCTATGATTTTTCTATTATTACCTTCAAGTTGTATTCTCTCTTACACTGTAGCCTCAACTAAGGCA  
ATTCTGCTATGTTTGTCTTCACTATGATTTACTGTGTGCCAAAGGAGTTTTGACAGGGTACAGAGTATTTTACT  
AAAAGTATTTTTTAAATGTTTCTCATGTGATTTCTGTACCTTCTTCTCTCTGCCCCCTTTGCTTTTTTAAAGAAAC  
TGGGGAAGGATTTATGAATACACCACCAGAGTGGATAATGCTTAGAATCTTTATTGGTGGCCCTACTATGG  
TGATGATCTAGAACTGACTTACTTTCAGGACAGAGAAAAAACAATCACACCCTTAACCTTTAAGCCAGTTAGATC  
AGGGGGTTGCAACAATTGGGTAAACTTTGGGTATACATTGGAAGCACCAGGCATGTTTGCTTTTTTGTGTTAT  
GTGTTTGTGTTTTTGAGACAGAGTCTCACACTGTGGCCAGGCTGGACTCCAGCACAGTGGCATGATCTCAGCTCC  
GCCTCCTGGGTTACGTGATTCTCATGCCTCAGCCTCCCGGTGGCTGGGATCACAGGCGTGCACCATCACGCC  
GGCTAATTTTTGTATTTTCACTCGAGACCGGCCCTGGCCAACGTGGTGAAACACCGTCTCTACTAAAAATACAAA  
AATTAGGTGTGGTGGTGGTGGCTGCTGATTCCCGGCCACTCGGGAGGCTGAGGCAGGAGAATCGCTGGAACCTGGG  
ATGTGGAGGTTGCAGTGAGCCAAGATTGCACCACTGTACTCCAGCCTGGGCAACAGAGGGAGACTCCATCTAGAC  
TCCATCTCAAAAAAAAAAAAAAAAAAAAAA

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**FIGURE 2286**

MTDLNDNICKRYIKMITNIVILSLIICISLAFWIISMTASTYYGNLRPISPWRWLFVVPVLIVSNGLKKKSLD  
HSGALGGLVVGFILTIANFSFFTSLMFFLSSSKLTWKGEVKKRLDSEYKEGGQRNWVQVFCNGAVPTLALLY  
MIENGPGGEIPVDFSKQYSASWMCLSLAALACSAGDTWASEVGPVLSKSSPRLITTWEKVPVGTNGGVTVVGLVS  
SLLGGTFVGIAYFLTQLIFVNDLDISAPQWPIIAFGGLAGLLGSIVDSYLGATMQYTGLDESTGMVVNSPTNKAR  
HIAGKPILDNNAVNLFSSVLIALLLPTAAWGFWPRG

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**FIGURE 2287**

CACAGGGACTGCGCTCCCTTGCCCTAGCGCTCCCGCGCTGCTGCTCCAGCCGCCCGGCAGCTCTGAGGATGGAG  
AGGAGGGCGCGGAGCTCCTCCAGGGAGTCCCGGGCGAGGCGGCAGGACTCCGCACAAGGAGAACAAGAGGGCA  
AAGGCCGAGAGGAGCGGCGGGGGCCGCGGGCGCCAGGAGGCTGGGCCCCGAGCCGTGCGGCTCCGGACGGGCGGGG  
ACCCCGGGGGAGCCCCGAGCGCCCGCCGCCACGGTGGTGGACGTGGATGAGGTCCGAGGCTCCGGCGAGGAGGGC  
ACCGAGGTGGTGGCGCTGTGGAGAGCGAGCGGCCCGAGGAAGGTACCAAATCCTCCGGCTTAGGGGCCCTGTGAG  
TGGCTTCTGTCTCATTTCCTGCTCTTCATCATCATGACCTTCCCTTTTCCATCTGGTCTGCGTAAAGGTT  
GTACAAGAGTATGAAAGAGTAATTATATTCCGACTGGGACATCTGCTTCTGGAAGAGCCAAAGGCCCTGGTCTT  
TTCTTTTTTTTGCCCTGCCTGGATACCTACCACAAGGTTGACCTTCGTCTCCAACTCTGGAGATACCTTTTCAT  
GAGATCGTGACCAAAGACATGTTTATAATGGAGATAGATGCCATTTGCTACTACCGAATGGAAAATGCCTCTCTT  
CTCCTAAGCAGTCTTGCTCATGTATCTAAAGCTGTGCAATTCCTTGTGCAAACCACTATGAAGCGTCTCCTAGCA  
CATCGATCCCTCACTGAAATCTTCTAGAGAGGAAGAGCATCGCCCAAGATGCAAAGGTTGCCTTGGATTCACTG  
ACCTGTATTTGGGGAATCAAAGTGGAGAGAATAGAAATTAAGATGTGAGGTTGCCAGCTGGGCTTCAGCACTCA  
CTGGCTGTGGAGGCTGAAGCGCAAAGACAAGCCAAAGTGGGATGATTGCTGCAGAAGCGGAAAAGGCTGCTTCT  
GAGTCCCTGAGGATGGCAGCTGAGATTCTGTCAGGCACCCCTGCTGCTGTTGAGCTTCGATACCTCCACACCCCT  
CAGTCTCTGTCCACAGAGAAGCCTTCCACTGTGGTTTTACCTTTGCCATTTGACCTACTGAATGCCTGTCTTCT  
CCCAGCAACAGAACTCAGGGAAGCCTCCCTTCCCAAGTCCTTCCAAACCTGTTGAGCCACTAAATCCTAAAAAG  
AAAGACTCTCCCATGTTATAGGAAGGATGGGGCATAATGTGACTGTAAAGGGGCCTGCCATAGAAAAGTCACATC  
CCTGAGGGAGACACTCTGTCTCATTCCCTGCCCTTCCCTTTGGTTGCCATATGGAATGGCCATGGAATGCACGAA  
GTCACAATGCACCATCCATGAGAAGACAGTGAAATGATGTAATGACAGAGAAGGCAGACAACATGTTTCCGTGAC  
TCATCTAGTCAGAGCAATTATGGGAAACAGCTTTGGTCAACATTCTACTTTGGAAAGAATTTTGAGTCTAGATGT  
GGTTAAATTTTGACTTCTGGGAACCTTGGTTGAGATGTCCCTTTCACTGIATGTCCCTCTGACCCCTTTGGCAAGGT  
TGCCACAGCTCCACAGCCCTTCCTACAAGCACCTATCATTGGGCTTGTACACTCTATTGCTCTTCTGTCCCGA  
AGATGCAGTCTTCTCTCCAATGATACTACCAAGTCTTAGTTTTCTCAACCACACTCAATCTTTTTGCTCCACCC  
TGAATTCCTCACACCTAACCTGATAGTTACCTAAAGTGACACTTAAATGTTTCAGAGTGAATGCAAAAAGAGA  
GATGTACTTGGAGTCGGATATACAATTTATCCCTAATTAAGCATTATAAAGG

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**FIGURE 2288**

MERRARSSSRESRGRGGRTPHKENKRAKAERSGGGRGRQEAGPEPSGSGRAGTPGEPRAPAAPTVVDVDEVRSGE  
EGTEVVALLESERPEEGTKSSGLGACEWLLVLISLLFIIMTFPFSIWFCVKVVQEYERVIIIFRLGHLLPGRAKGP  
GLFFFLPCLDTHYHKVDLRLQLEIPFHEIVTKDMFIMEIDAICYRMENASLLLSSLAHVSKAVQFLVQTTMKRL  
LAHRSLTEILLERKSIAQDAKVALDSVTCIWGIKVERIEIKDVRLPAGLQHS�AVEAEAQRQAKVRMIAAEA  
ASESLRMAAEILSGTPAAVQLRYLHTLQSLSTEKSTVVLPLPFDLLNCLSSPSNRTQGS�FPSPSKPVEPLNP  
KKKDSPML

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**FIGURE 2289**

ATGGATGGGGGAACCGGGCGGCGAGACGGCGGCAGGACGGCGGCAGGATGTGTGACCGGAATGGTGGTCGGCGGC  
TTCGACAGTGGCTGATCGAGCAGATTGACAGTAGCATGTATCCAGGACTGATTTGGGAGAATGAGGAGAAGAGCA  
TGTTCCGGATCCCTTGGAAACACGCTGGCAAGCAAGATTATAATCAGGAAGTGGATGCCTCCATTTTTAAGGCCT  
GGGCAGTTTTTAAAGGGAAGTTTTAAAGAAGGGGACAAAGCTGAACCAGCCACTTGGAAGACGAGGTTACGCTGTG  
CTTTGAATAAGAGCCCAGATTTTGAGGAAGTGACGGACCGGTCCCAACTGGACATTTCCGAGCCATACAAAGTTT  
ACCGAATTGTTCCCTGAGGAAGAGCAAAAATGCAAACTAGGCGTGGCAACTGCTGGCTGCGTGAATGAAGTTACAG  
AGATGGAGTGC GGTCGCTCTGAAATCGACGAGCTGATCAAGGAGCCTTCTGTGGACGATTACATGGGGATGATCA  
AAAGGAGCCCTTCCCCCGCGGAGGCCTGTCGGAGTCAGCTCCTTCCAGACTGGTGGGCGCAGCAGCCCAGCACAG  
GCGTGCCGCTGGTGACGGGGTACACCACCTACGACGCGCACCATTTCAGCATTCTCCAGATGGTGATCAGCTTCT  
ACTATGGGGGCAAGCTGGTGGGCCAGGCCACCACCACCTGCCCCGAGGGCTGCCGCCTGTCCCTGAGCCAGCCTG  
GGCTGCCCCGGCACCAAGCTGTATGGGCCCAGGGCCTGGAGCTGGTGCGCTTCCCGCCGGCCGACGCCATCCCCA  
GCGAGCGACAGAGGCAGGTGACGCGGAAGCTGTTTCGGGCACCTGGAGCGCGGGGTGCTGCTGCACAGCAGCCGGC  
AGGGCGTGTTCTGTAAGCGGCTGTGCCAGGGCCGCGTGTCTGCAGCGGCAACGCCGTGGTGTGCAAAGGCAGGC  
CCAACAAGCTGGAGCGTGATGAGGTGGTCCAGGTCTTCGACACCAGCCAGTTCTTCCGAGAGCTGCAGCAGTTCT  
ATAACAGCCAGGGCCGGCTTCCTGACGGCAGGGTGGTGCTGTGCTTTGGGGAAGAGTTTCCGGATATGGCCCCCT  
TGCGCTCCAACTCATTCTCGTGAGATTGAGCAGCTGTATGTCCGGCAACTGGCAGAAGAGGCTGGGAAGAGCT  
GTGGAGCCGGCTCTGTGATGCAGGCCCCGAGGAGCCGCCGCCAGACCAGGTCTTCCGGATGTTTCCAGATATTT  
GTGCCTCACACCAGAGATCATTTTTTCAGAGAAAACCAACAGATCACCGTCTAAGTGGCTCGCTTGGGCGCCCCAC  
CCCGTCTGCGTCTGTCATCCATCTCCCTGTACAGTGGCCCGCATCATGATTAAAGAATGTGGATCCCTCTGTCT  
GGGGTGGGATGCCTTACTTTGCACTTAATTTAATAAGGGCATTCTCGGAGGAGTAGACGTTTAATACGAAGTGGC  
GCATAGCCCTGCCGAGATGTCGGTGATGGCCTGATGCG



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**FIGURE 2290**

MCDRNGRRRLRQWLIEQIDSSMYPGLIWENEEKSMFRIPWKHAGKQDYNQEVDASIFKAWAVFKGKFKEGDKAEP  
ATWKTRLRCALNKSPDFEEVTDRSQLDISEPYKVYRIVPEEQKCKLG VATAGCVNEVTEMECGRSEIDELIKEP  
SVDDYMGMIKRSPSPPEACRSQLLPDWWAQQPSTGVPLVTGYTTYDAHHSASFQMVISFYGGKLVGQATTTCPE  
GCRLSLSQPLPGTKLYGPEGLELVRFPPADAIPSERQRQVTRKLFHGLERGVLLHSSRQGVFVKRLCQGRVFC  
GNAVVKGRPNKLERDEVVQVFDTSQFFRELOQFYNSQGRLPDGRVVLCFGEFPDMAPLRSKLILVQIEQLYVR  
QLAEEAGKSCGAGSVMQAPPEPPDQVFRMFPDICASHQRSFFRENQQITV

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**FIGURE 2291**

GGTGTACAGCAAGCTGTGATTCTTGGGAAAACATAAAAAAGTTTTCTGGGACAACGGGGCCCCAGAGTGATGGCAG  
ACAATGTCAGCCACTAACAACATAGCCCAGGCCCGGAAGCTGGTGGAACAGCTACGCATAGAAGCCGGGATTGAG  
CGCATCAAGGTCTCCAAAGCGGCGTCTGACCTCATGAGCTACTGTGAGCAACATGCTCGGAACGACCCCTGCTG  
GTCGGAGTCCCTGCCTCGGAGAACCCCTTTAAGGACAAGAAACCTTGTATTATTTATTAACGTGTCTCATATG  
TTCTCTCTCTCTCTCTTTCTTTCTCTCTCTCTCTGTCTCTGTCTCTCAGGCAGGGCATCATTCAGTAAT  
TAGCTCAAACAAAACATCTCAAGTCCCCAAAACCTTTAATTCCAAAAGAAATCCCCCTCTACCCGCCAAAAAA  
GGCGTTCCACCGCCCGGATGGGGTAGAATGGACCTGTAGGTGGAGATGAATTTTCAGGTCCGACCCCATGGCC  
TTCTCAGTTTGGGCCAAAAGGGATGGAGGCTTTACGGCCACTTCCCGTTCGGAATAACTGAAATCCCCAGCGATG  
GGGTAAACAATTTTTTAAACTCTCGATTGCCGTTTCAATTGTGGACCGGCGCCGAGGGGGAAAGGGAGGTGACTT  
CGCCCGGTGGCAATAGTTCGGGAGAATTGGCCATTGGTAAAAAGACTTCATAGGGTCACTGGAATGCTTTGTGT  
TGTTTTTAAGTAGAGGTAAAATTGAGATGGGGGGCGGGAGGTGACATCATGAAGTTTTTTGGAAATATCTCTTTA  
TTTAAAAAATTGTTACTCCATACGGCTAAAAAAG

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**FIGURE 2292**

MSATNNIAQARKLVEQLRIEAGIERIKVSKAASDLMSYCEQHARNDPLLVGVPASENPFKDKKPCII

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**FIGURE 2293**

CGGTGCTAGCGACACGGGAGTGGCAAACGCATCCTCTTGCCGTTCCCGGTGTTTGGGCCTTGCCTGTGACGGTGG  
GAAAAGAAAATGGCCTTGCTGTGCTACAACCGGGGCTGCGGTGAGCGCTTCGATCCTGAGACCAATTCGACGAT  
GCTTGACATACCCAGGTGTTCCGGTCTTTCACGATGCATTAAAGGGTTGGTCTTGCTGTAAGAGAAGAACA  
ACTGATTTTTCTGATTCTTAAGCATTGTAGGCTGTACAAAAGGTAGACATAATAGTGAGAAGCCACCTGAGCCA  
GTCAAACCTGAAGTCAAGACTACTGAGAAGAAGGAGCTATGTGAATTAACCCAAATTCAGGAACACATCATT  
CAAGCCCCTAAGCCAGTAGAAGCAATAAAAAGACCAAGCCAGATGAACCAATGACAAATTTGGAATTAATAA  
TCTGCCTCCCTAAAACAAGCACTTGATAAACTTAACTGTGCATCAGGGAATGAAGAAAATAAGAAAGAAGAAGAC  
AATGATGAAATTAAGATTGGGACCTCATGTAAGAATGGAGGGTGTTCAAAGACATACCAGGCTCTAGAGAGTCTA  
GAAGAAGTCTGTGTATATCATTCTGGAGTACCTATTTTCCATGAGGGGATGAAATACTGGAGCTGTTGTAGAAGA  
AAAACCTCTGATTTTAATACATTCTTAGCCCAAGAGGGCTGTACAAAAGGGAACACATGTGGACTAAAAAGAT  
GCTGGGAAAAAGTTGTTCCATGTAGACATGACTTGCATCAGACTGGAGGTGAAGTTACCATTTTCAGTATATGCT  
AAAACTCACTTCCAGAACTTAGCCGAGTAGAAGCAATAGCACATTGTTAAATGTCATTATTGTATTTGAAGGA  
GAGAAGGAATTTGATCAAAATGTGAAATTATGGGGTGTGATTGATGTAAAGCGAAGTTATGTAACATGACTGCA  
ACAAAGATTGAAATCCTATGAGAAAAGCTGAACCGATGCAGTGGGCAAGCCTTGAAGTGCCTGCAGCTAAAAAG  
CAGGAAAAACAAAAGATGACACAACAGATTGAGTGGGAGATGGAAGGAAGGCTATTACATTATTTCCGAATTTT  
TAATACTGTGTGAAGTGGTGGCTTGCTGTGTAATCTTTTGTGTTTGTGTTGTGTTACTGAATGTGGCATTTCAG  
GGTTAACATTAGGTTCTTAAAGCCAAAGTCAGTTTGTCTTTTGTGCCTCTCATCTTTCTTTGTGTTATGTAA  
GATTGATTATTCATTTCTCCCTACTGGTAGGAACCATAGTTGTGTCCTATACTTGAAGAGGCTGGAAAGTAGCCC  
ATAACCATAATTGCAGTATTTCTTTGTATTTCTCTGTTAAGCAAAGAAATATTAAGGAACATTTTTTTATGTTT  
TTGTATTATTCATAATTAGTAAAGCAAGATGAAATGTCAAATTTTAATCAGTTTTTTCATGGATTTGTGTTCTT  
ACAGTACTTGAAAATATTTAAGGAAGAGATGAAGCTCTGCAGTTTTTCTATGTGGGATGATTACTTTTTTAAGG  
AGGATTAATTCTGAGGTAGTATAGTAACTAAAGGGGAATATATGAATTGTTTAAACAAATTAGAATTTGTTTACAA  
CTACTTGAATTTTAAATTATGTCAAACTTACATTACTTGCCAAGCAGTATGATGTTATAGGAAACATAAATAA  
GATTACAGAGGTATCAATTTGGTTAAATTCACCATTTTATAAGACTAAGCAATAATCTTAACAACCTCTTTCCCT  
GAATATTTAAATGTGTTTGTATGGTGTATGACTAATTGTTTACTGATTTAGAGACTAAGCCCTCTTAAACCTTT  
AGTTAAATATAAAAAGAAATTATATATATCTTGCTCCCTGATGGAAAACATATAAAATTGTAGACTTAAAGG  
TTTGTGGAATACATTAGGATATCAGAAAACATAATATATGGAGTTGCTTTATGACTATTACATGTAAATAAAA  
ATAGCTTAATTGTTAAAAA

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**FIGURE 2294**

MALLCYNRGCGQRFDPETNSDDACTYHPGVPVFHDALKGWSCCKRRITDFSDFLSIVGCTKGRHNSEKPPPEVPKP  
EVKTTEKKELCELKPKFQEHIIQAPKPVEAIKRPSDEPMTNLELKISASLKQALDKLKLSSGNEENKKEEDNDE  
IKIGTSCKNGGCSKTYQGLESLEEVVCVYHSGVPIFHEGMKYWSCRRKTSDFNTFLAQEGCTKGKHMWTKKDAGK  
KVVPCRHDLDHQTGGEVTTISVYAKNSLPELSRVEANSTLLNVIIVFEGEKEFDQNVKLWGVIDVKRSYVTMTATKI  
EITMRKAEPMQWASLELPAACKQEKQKDDTTD

CCGAGGCCGGCTCTGGCCTCCTGACCCAGACGAGCGAGGCGCGAGGGATCGCGCGGCCGAGCCCGGGTCCGCC  
GCTCCCAGCATCTGGGGCCGTAGCCAGAGATTCGAGGCCCTTCCCGATCCGGATGTGATGAAAAAGAGCAACAGAG  
GGAGAAGTGTTTTAGGATTGTAGGACTGGAAGAGGGGAAAGAGAGGCAGAGAGGGGGAAGGCCCCCTCGCAGGGG  
AGCCGGCTGGAGTGAAGCTGGCTGGAAAGAGGGGGCGGAGTGCAGCGGAGTCAAGAGCCGCCACCGCTGCCGAGTTG  
CCGCCACTGCGGCGTCTGGGCTGAGCCGGAGGGAGCGGGAGGACGCGCAGGGGGCGCCGCCCGCTCGTCAGGC  
CACC GGCGGCGAAAAATGCGGCCGCTGCCGGAGGCTCGCTAACTTTCCGGGGCGGAAGAGGAGGAGGAGGAGGA  
AGGGGCTTGGAGCGACTACGGGGGATGCGGAGAAGCAGTCAGTTCCCTGCACCCAGCACCTCACAGCCCTTCTCT  
CCGTGCGCCCTGCCGGGGCGCGAGCTAGGCGGCAGCGGCGCGGCGCGGGCTCGGCGGAGCGGCCCATGTCCGGCG  
CGGGCGAAGCCCTCGCTCCCGGGCCCGTGGGGCCGCAGCGCGTGGCCGAGGCGGGGCGCGGCCAGCTGGGCTCCA  
CAGCCCAGGGAATGTGATAAAGACAATACTGAGAAAGATATAACTCAAGCTACCAATAGCCACTTCACACATG  
GAGAGATGCAAGACCAGTCCATTGTTGGGAAATCCTTCGGATGGTGAATCATTAGAACCAACCTCAGCGCTTGC  
CTCAGCTTCAGACTTCAGCACAGGTGCCAAGTGGTGAGGAAATAGGCAAGATAAAGAACGGCCACACAGGTCTGA  
GCAATGGAAATGGAATTCACCACGGGGCCAAACACGGATCCGCAGATAATCGCAAACCTTCAGCACCTGTTTCTC  
AAAAATGCATAGAAAAATTCAGTCCAGCTTGTCTGTAAACAGCGATATCAGTAAGAAGAGCAAAGTAAATGCTG  
TCTTTTCCAAAAGACAGGCTCTTCACCTGAAGATTGTTGTGTCCACTGTATCTGGCTTGCTTGTCTGCGAAT  
TCCTGACCCTTTGCAACATTGTCTGGGACAAGCGTCATGTGGCATCTGCACCTCAGAAGCCTGCTGCTGTTGCT  
GTGGTGACGAGATGGGGGATGATTGTAAGTGCCTTGTGATATGGACTGTGGCATCATGGATGCCTGTTGTGAAT  
CATCAGACTGCTTGAAATCTGTATGGAATGCTGTGGAATTTGTTTTCTTCATTAATATTATCTTTTGTGTG  
GTTAAACTGGAGAGTGTTTAAAAATTTCTTTTGGGGGAAGAAAAGCACATTGTAAGATTCTCATGAAACAAC  
ATGGAATTTGCACTGTTAACTCATTATTGTAAGTAATCTCTGAAAGCCTTTTACTTTAACCAATCTACATGGT  
TTAATATGTGAAATTTTAACTACTTTAACTAGTTTTATAAATTTCTTAATATGTTACAATAACTTAGGGACATTT  
TGACACCCCCCTTCCCAATGTTAAATGCCCTCTCCTTTTTACCGATATTCTGTTTTCTTTAACCGTTCTCAGG  
AGCACTTTGCTCCAAATATATTATTTTTTCACTGTGTATTTTAAACGAGGCAGTTTATTTTGATATGTATCTATTCA  
TGATTGAAAGGAAGCAGTCTTGGCCAGGCACGGTGGCTTACACCTGTAACCTTGGCATTTTGGGAGGCCAAGGTG  
GGCAGATTGCTTGAGCTCAGGAGTTCGAGACCAGCCAGGGCAACATGGTGAAACCCCATCTCTACTAAAATACAA  
AAAGTTAGCTGGGCTTGGCGGTGTGCGCCTGTAGTCCCAGCTACTCAGGAGGCTGAGGCAGGAGAATTGCTTGAA  
CCCAGAGGCGGAAGTTGCAGTGAGCCGAGATTGTGCCACTGAACTCCAACCTGCACTCCAGCCTGGGCAACAGA  
GCGAGACTCCATCTCTAAATAAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAAATAA  
TATTTTAAAAGAACTTTAGGAAACAAACCCACATAATAGTTGGGAACAGTGTTGATCTCTCTCCCTTACCTTC  
TCCACTTGTTCAACAGACTCTGAATGCCGACTGTGTGGACTCTCTTCTCAGACTGTGGGGACAGATACAATTCC  
ACTCTGTCCACAGGAACATGAGATTTAGCAGACTAAGGAGATCTGTAAAGAATGAACCATACCACAAGGCATAC  
TGAAGTGAGGATTATAAGAGAAAAAACTCAAAATGCTGTTGGAATATGCAGAGAATTGCTACCAGAATATTACG  
TAAGGTTTCAGGGAGAATGTGGCATTGAGGACTCTCTTAGAATGAGTGATTACCTGCTATTAAATGAATTAT  
TTAGATTTTTGACAAAGATTTAGGTGGACACCCTAAACTGTGTGTGCCCTTAAACAGTTAAAGAAACAGTGCCTT  
CAGCATACTTTTTATTAGTTGTAGGAATACAGCTTTTTGAAAAAGAGCTATAAAGTTTAAATTAACATAAAATATG  
CATTTTCTTACACATAATTTAAATGTTATCATACTTTTTTGAATGAAAAACATAATGCCCTTAGTAAATAGCTCTAT  
TTAATAAAGAAGATTGAGTACTCTGACACATTTCATTAAATTAGGAAATTTTTAATATTAAATCCCAGTGTTT  
TGAGTTATTGAAAGGCTTTCTTTTTTATTTTGGAGAGCTTTAGGCTTTTTTGGGATGAGAACATTTTAGTTGTTTAGT  
TTGTTTCTTAAGCAGTGCTATTTTTTGTAAACACAGATAAATGGAAACCATTTCTTTTCAATGCAGAAGAAATCTA  
GATATCCCCTACTGTGACCAAATTTCTGTATTACGATTTTATGTTAAATTAACATAATATGGCAGGTTATAATGA  
TCCTTAAGTGTAAGAAATCAGTCAATTACAAGAGTAATTGTATAGTTATTGAGACCTATAGTGTGTGGCTTAGA  
TGAAAGGGAGAGTAATTTTCTATACCATGCTCTCTCTCTACTCAGTTTGATCTCTCTAAAATTGTAGTTTGGTTG  
ATTTAATATAATTCTTAGTAGAAATTTTGAAGATAGCTTTGGGATTAATAATTATTTTAAATTTTCTGGCTGA  
ATATCAAATTGATAGTAACAACAGAAGCATAATTTAGGAAGGCTTTCGCAAACCTAGCCTTTTAAAGAGAGGTTT  
TTAACTGAAGCATGAGAATATATCACCTGTGGTTTTCTCTTTGAGATGAAACGTAGTTTCTAGTTATATCATTA  
CTTAAAGGGCTTAAAAAGAAAAAATCTAGCAACTTTTGAATCTTTCTTTTATTGCTATTTACACATACATACAC  
ACATACAAAACCTTTAAATTTTGGGATCTGAATATAATTCTGGTAAACAGCTGTCTTCATTTTTCTCTCTAAAG  
AACTTAATTCATTTGTTACATAAAATATAAGGAAATCTTTATACTATTTTACAGTAACCAACATCTAAATATTTA

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**FIGURE 2295B**

CATATACCCAAAATTAACCTTATGCTCATATATTAGGATGTGAGAATATCATCTGTTTATGGACACATGAAACCTC  
CTAATGACCTGGAATTGTTAGAATATTTGACTTTTTATATGCAAAGTTTTCAACCAAGTGGTTTGTCTAATATT  
TAAACATGTACTGGCACAATTTGTGATGAAAATATTAGCACATTTGCAATAATGTTTCTCCATAACAGAGAATGT  
TAATGGATACCAGAATTTTATTTTTGTATTTATGTTTCATAGTACTTTTCCTCTTGTCTACTCCAGACAGTTATTC  
CATAAAGCATTGTGATAATTAAAAGGAAAACAGAAAAAGGAAAAGTAGGCAAATGTGAAAATAGTTTCAATATAT  
CTTATGATTTCTTAATGTAAAATGTTTTGTTGAAGTATATGGCTATCATGACTAAGTGCTAGAATTTATAGTTAC  
AGGCGGTGTCCTTTTAAATGTGGAAAGGCTTTTAAATATTTTAAACTGGACCTGTATTATCCTGAATACACTA  
TTTTGAAAATTTTAAAGAAAAA

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**FIGURE 2296**

VRGVRAATAAAVAATAASGLSRREAGGRAGAAA VVRPPGRKCGRCRRLANFPGRKRRRRRRKGLGATTGGCGEA  
VSSLHPAPHSPSSVRPAGRRARRQRRGAGSAERPMSGAGEALAPGPVGPQRVAEAGGGQLGSTAQGKCDKDNTK  
DITQATNSHFTHGEMQDQSIWGNPSDGE LIRTQPQRLPQLQTS AQVPSGEEIGKIKNGHTGLSNGNGIHHGAKHG  
SADNRKLSAPVSQKMRKIQSSLSVNSDISKSKVNAVFSQKTGSSPEDCCVHCILACLFCEFLTLCNIVLGQAS  
CGICTSEACCCCGDEMGGDCNCPDMDCGIMDACCESSDCLEICMECCGICFPS



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**FIGURE 2297A**

ACTGCCGTGCCGGACCCCCGAGCCGGAGCCGAGCGCGCCGAGGCCGGGGCCATGGAGAAAGCGCGGCCGCTGTGG  
GCCAACTCGCTACAGTTTCGTGTTTCGCTGCATCTCGTACGCCGTGGGCTGGGCAACGTGTGGCGATTCCCGTAC  
CTGTGCCAGATGTACGGCGGAGGTAGTTTCTGGTCCCCCTACATCATCATGCTTATCGTGGAGGGAATGCCGCTC  
TTGTACCTGGAACCTGGCTGTGGGGCAGCGCATGCGGCAGGGCAGCATCGGCGCCTGGAGGACCATCAGCCCGTAC  
CTCAGTGGTGTGGGGTTCGCCAGCGTGGTGGTCTCTTTCTCTCTCCATGTACTACAACGTATCAACGCCCTGG  
GCCTTCTGGTACCTCTTCCACTCCTTCCAGGATCCCCCTGCCGTGGTCTGTCTGCCCACTGAATGGTAACCACACG  
GGCTACGATGAGGAGTGCAGAAAGGCGTCTCCACACAGTACTTCTGGTACAGGAAAACCTCAATATCTCGCCG  
TCCCTCCAGGAGAACGGGGGTGTGCAGTGGGAGCCGGCGCTGTGCCTCCTCTGGCCTGGCTGGTGGTGTACCTG  
TGATCCTGCGTGGCACCAGTCCACTGGCAAGGTGGTGTATTTACGGCGTCACTGCCCTATTGCGTGTCTATC  
ATCTACCTCATCAGGGGCCCTACGCTCCACGGAGCCACCAATGGCCTCATGTACATGTTCACTCCCAAGATAGAG  
CAGCTGGCCAACCCCAAGGCCCTGGATCAATGCAGCCACCAGATCTTCTTCTCACTTGGCCTGGGCTTCGGCAGC  
CTGATCGCCTTCGCCAGCTACAATGAGCCATCCAACAATGCCAGAAGCAGCCATCATCGTGTCCCTCATCAAC  
AGCTTACCTCCATATTTGCCAGCATTGTACCTTCTCCATCTATGGCTTCAAGGCCACCTCAATTATGAAAAC  
TGCTTGAAGAAGGTGAGTCTGCTGCTGACCAACACTTTTGACCTTGAAGATGGCTTTTTGACAGCCAGCAACCTG  
GAGCAGGTGAAGGGCTACCTGCATCTGCCTACCCAAGCAAATACAGCGAGATGTTCCCGCAAATCAAAAACCTGC  
AGCTTGAATCGGAGCTAGACACGGCCGTCCAGGGCACTGGCCTGGCATTATCGTCTACACAGAGGCCATTAAA  
AACATGGAGGTGTCCAGCTGTGGTCCGTGCTCTACTTCTTATGCTGCTGATGCTGGGCATTGGGAGCATGCTG  
GGGAACACAGCGGCCATCCTACCCCTCTGACAGACAGCAAGATCATCTCCAGCCACCTGCCCAAGGAGGCCATC  
TCAGGTCTGGTGTGCCTTGTCAACTGTGCCATTGGCATGGTGTTCACGATGGAGGCTGGGAACACTGGTTTTGAC  
ATATTCAACGACTACGCGGCCACACTGTCCCTGCTGCTCATCGTGTGGTGGAGACGATTGCCGTGTGTACGCTG  
TACGGGCTGAGGAGATTTGAAAGTGACCTTAAGGCCATGACCGGCCGAGCTGTGAGCTGGTACTGGAAGGTGATG  
TGGGCTGGCGTAAGCCCACTGCTGATTGTGAGCTCTTTGTCTTCTACCTGAGCGACTACATCCTCACGGGGACC  
CTGAAGTATCAAGCCTGGGACGCTCCAGGGCCAGCTCGTGACCAAGATTACCCGGCCTATGCACTGGCTGTC  
ATCGGGCTGCTTGTGGCCTCCTCCACCATGTGCATCCCCCTGGCGGCCCTGGGGACTTTTGTTCAGCGTTCGCCCTC  
AAGAGGGGAGACGCAGACCCCGTGGCCTTGAGATGTGGGCTTCCAGCCGCTCACGGTTTTACAGATACTATTTAC  
AGCGGAAACTCCTCGGCTGCTTTTTCAAATGCTTAAGCCAGGAGTGCTCAGCCCATCAACTTCTGAGTGTCTA  
AAGAAGATGAGGAAGGTGTGCAGGAAGAAAATCCCTTGGGAGAACGCACACCTCCCGTGGTGGCTGTTCCCTCC  
CTGTACCTGCCCTCCTCATCATGGAAGGGGTGGGCTATGAAAGCCGGTCTCAAAGATAACTGCATCCTTCATT  
CAGGAAAGCCCTAGAATTAGGGCACATTGCAAATGAAATATGACTATAATTCTTATGGGACCAAAATTAAGCAA  
TTTTTGTTTTTGGCTGAAGAGACACCAAAATATTAGAGGACAAATATTTTAGATCCATTTAAGGAGTTTTGAAG  
TGCTTAAGATGACCTATTTGTGAGTGGTGCAAAATTAATTCTTCTTTTTTGGAGTTGTAGTGAATATGCAATTT  
CTGTGTTCCCTTCCACCCCTTTAAATCTTAGGATGACAAGTTATAAGAAAGAAAGATCTTTGTCTGGGACCCCCA  
AAGGGATCCTTTCTTAAGGTCTCTGACAGTGGGTCCAGGACCAGACCTCTCTACAAAAAATTGCCCAACTACA  
GTTTGCAACCCCAACCAATTAGAAAGTCTGTGCAGACATCCCTCCGTGGTGTGTGCTTGGTGCATTGGAAAAG  
GAGTCAGGAGCCACTGTGAGGTGAGAATGAAAGTGGATCTCAGCTGGGCACGGTGGCTCACGCCGTGAATCCTAG  
CACCTTGGGGGTCAAGGTGGGTGGATCACTTGAGGTGAGGAGTTTGGGCCAGCCTGGCCAACATGGCGAAACCC  
CATTTCTACTAAAAATACAAAAAATTAGCTGGGAGTGGTGGCATAGGCCTGTAAATCCAGCTACTCTGGCTGCT  
GAGGCACAAGAATCATTTGAACCTAGGAGGTGGCGGTGTGTGTGAGCCAAGATCATGCCACTCCACTCCAGTCTG  
GGGACAGAGCAAGACTCTGACTCAAAAAAAAAAAAAAGTGGCTCTGACTTTCCCATAGGCTTAATATTACATTT  
GGACATCGTGGCCAACTCTATCAAGACCACAAATACCACTTACAATTAATTTTAAATTATTATCTGTACATAGT  
TTTCTAAATGTATATAATTCAAACAGAGCATCTTGTAAGTGAAGACACACCATATCTATGATATCGCATTAGTC  
CATGTGGGGAAAAGAAAGATCAGATTGTACTGTGTCTGTGTAGAAAAGGAAGACATAAGAACTCCATTTTGAT  
CTGTACTAAGAAAATTTGTTCTGCTTTGAGATGTTGTGTAGCCTATAACTTTAGCCCCAACTCTGTGCTCACAGA  
AACATGCGCTGTAATGAATCAAAGTTTAATGGATTTAGGGCTGTGCAGGATGTGCCCTGTTAACAATATGTTTGC  
AGGCTGTATGCTTGGTAGAAGTCATCGCCATTCTCCATTCTCGATTAAACCAGGGACACAATGCACAGCAGAAAGC  
TGCAGGGACCTCTGCCAAGAAAGCCTGGGTATTGTCCAAGGTTTCCCCCACTGAGACAGCCTGAGATATGGC  
CTCATGGGAAGGGAAGACCTGACTGTCCCCAGCCGACACCTGTAAAGGGTCGGTGTGAGGAGGAATAGTGA  
AGGAGGGAGGCCTCTTTGCAGTTGAGATAAGAGGAAGGCTTCTGTCTCTGCTTGTCCCTGGTAAATGGAATGTCT

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**FIGURE 2297B**

CGGTGTAAAGCTGACCATTCCATTTCGTTCTATTCTGAGATAGGAGAAAACCGCCCTGTGGCTGGAGGTGAGATA  
TGCTGGCAGCAATACTGCTCTGTTACTCCTTGCTACACTGAGATGTTTGGGTAAAGAGAAACATAAATCTAGCCT  
ACGTGCACATCTGGGCACAGTACCTTTCCTTGAACCTATTTCGTGATACAGATTCCCTTGCTCACATGTTTCCCTG  
CTGACCTTCTTCCCACCTGTTGCCCTGCTACACTCCCCTCGCTAAGACAGTAAAAATAATGATCAATAAATACTG  
AGGGAACTCAGAGGCCAGCGCGGTGCGGGTCTCCACATGCTGAGCGCCGGTCTGGGCCCACTGTTCTTTCTC  
TATACTTTGTCTCTGTGCTTATTTCTTTCTCAAAAAATTTTCTTTTTTAACTGCAATAAAGTAGGTCGTT  
ACCCCTAAAGTGAGCGAGTCCCTTCCTGCTCTAACGTCCAGTGCTTCCTTGAGATCATGGAATTCTGGAGAGTTT  
CTGTGGATATATTTGCACAGATATCTTTGAAGACACAAACACTCACCTGGGACGTTGGCCGGAGATGTCTTTTA  
TTTTTGCTGTGTAATAATCTCTTACAGCAAAAATAGGCTTTAGAAAGGTCTTCTACTGTCTTCAGCAACCATCTC  
ATCTTCCAGCTTCACCTGATTGTCCAGTTATCATACATTTGACTTTCAAATGTATGAACCAGCATGTACCCCATG  
GATTTAATCTTATCTACCCCGTGGATTCAATCTTCTTATCAGAAGGTTCTTTTATGTCAAAAAACCTGCTGTCAA  
GGCTTGAAGAGCCGGCACACTCAATGGCAAACACAGCACCGAGTCTGCTCTGAATCCTGGAGGATCTGGCCCTCC  
TCTCAACCCCACTCACAGTCACCGTCTTACAACCTCAGGGCCACCTGGGATCAGTCATCAGTCAGGGTGCSTAAG  
CCTTGAATACCAGGTAGCCGCAGGAGTAAAAGATAAATGTCTTAGATCATTACCTTATTCAGTGTCCCCACCTT  
GCAGCGCATTCCAACCACCTGGGAGCATTAAAACTCCAGATGCCACACCACACCCTGGGGCCACCCATCAGAC  
CTTCTGGAAGCAAGACCTGGGCCTCCATGGCCCCAAAACTCCCTAGGTGATCCGATGTGCAGCCAAATTTGAGA  
GGCCCCATTTAAAAAAGAAAGAACATGGGTGGTACATTGAGGAGTATTTACATTTTATAAAATGACTTAAAAATT  
TGAAGGCATTTTGTAGCATTCCAATTATATGGAAGAGTTACTTCTACGGAATAGTTTTTGTCTCATGGAACCTCAA  
ACAGATGAAGCACCCTGTTACAGAATAATGTGCTCCAGATGAAAATGTCTCGTTTCTGTGAATTTTCATGAAGAG  
CAGAACATTTCTCAAGAATCCTCTTGAGCCAGTAATCAATCCTGTCTCAAAAAATGTTCTTTGCCATTTCTTAGA  
TACTGCACAAAAGTGGCCATGTGACATTTGTCCACCCACCCTCCAATAAGCTGGAGCGACAAAGGGACATTCCA  
TCCCTGTACCCCTTAGTGGTAGCCATGACACGATGGCCAGATCATGGACTCCGGAAAGCTTTCTGTTTTTACTGGA  
AACATAGCAAACCTTGATTTAGCTCCAAGAAATTGAGTAGGGAAATATTTGTTTTTTAGCAATTGTCATAGTAAA  
TAAACTCTAAGCAAATGTGTGTAC

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**FIGURE 2298**

MEKARPLWANSLQFVFACISYAVGLGNVWRFPYLCQMYGGGSFLVPYIIMLIVEGMPLLYLELAVGQRMQGSIG  
AWRTISPYLSGVGVASVVVSFFLSMYYNVINAWAFWYLFHSFQDPLPWSVCPLNGNHTGYDEECEKASSTQYFWY  
RKTLNISPSLQENGGVQWEPALCLLLAWLVVYLCILRGTESTGKVVYFTASLPYCVLIYYLIRGLTLHGATNGLM  
YMFTPKIEQLANPKAWINAATQIFFSLGLGFGSLIAFASYNEPSNNCQKHAIIVSLINSFTSIFASIVTFSIYGF  
KATFNYENCLKKVSLLLTNTFDLEDGFLTASNLEQVKGYLASAYPSKYSEMFPQIKNCSLESELDTAVQGTGLAF  
IVYTEAIKNMEVSQWLSVLYFFMLLMLGIGSMLGNTAAILTPLTDSKIISSHLPKEAISGLVCLVNCAIGMVFTM  
EAGNYWFDIFNDYAATLSLLLIVLVETIAVCYVYGLRRFESDLKAMTGRAVSWYWKVMWAGVSPLLIVSLFVLYL  
SDYILTGTLKYQAWDASQGQLVTKDYPAYALAVIGLLVASSTMCIPLAALGTFVQRRKRGDADPVA

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**FIGURE 2299**

GAGAGATGCTGCCGCTGCTGCTGCCGCTGCCCTGCTGTGGGCAGGGCCCTCGCTCAGGATGCAAGATTCCGGCT  
GGAGATGCCAGAGTCCGTGACGGTGCAGGAGGGTCTGTGCATCTTTGTGCACTGTTCCGGTCTTCTACCTCGAGTA  
TGGCTGGAAAGATTCTACCCCTGCTTATGGCCACTGGTTCCGGGAAAGGGTCAGTGTAGACCAGGAGACTCCATG  
GCCACAAACAACCTCAACTCAAAAAGTGCAGAAGGAGACCCAGGGCCGATTCCACCTCCTCGGTGATCCCTCAAGG  
AACAACTGCTCCCTGAGCATCAGAGACGCCAGGAGGAGGGACAACGGTTCATACTTCTTTTGGGTGGCGAGAAGA  
AGAACAAAATTTAGTTACAAATATTCCCGCTCTCTGTGTATGTGACAGCCCTGACCCACAGGCCCGACATCCTC  
ATCCCGGAGTTCTTAAAGTCTGGCCATCCCAGCAACCTGACCTGCTCTGTGCCCTGGGTCTGTGAGCAGGGAACA  
CCCCCATCTTCTCCTGGATGTCAGCTGCCCCACCTCCCTGGGCCCCAGGACCTCCACTCCTCAGAGCTCAGG  
ATCATCCACGGCCTCAGGACCACGGCACCAACCTCATCTGTCAGGTGACGTCCCCGGAGCTGGTGTGACCACG  
GAGAGAACCATCCAGCTCAGTGTCTCCTGGAAATCAGGAACCGTGGAGGAGGTGGTTGTTTTGGCCGTGGGGTA  
GTGGCTGTGAAGATCCTGCTTCTCTGCCTTTGCCTCATCATCCTCAGTTTCCACAAGAAGAAGGCGGTGAGGGCA  
GTGGAGGTTGAGGAGAATGTATATGCTGTTCATGGGTTAATCTCTCAGGCCTCCAGACTGTACTTCCAGATGTCTC  
CTCATCCAGTTCTCCACAGTCTGAATGGCCATGTTTCTTCTCATTGCTGGAGAATGAAGTGCAAATGCCACTG  
CCTGGACTGAAGGCCTTTACGATCTGTCTTCTGCTGGACTCTGCTCCTGATCCCCCTTCTCCTTGCATCACCCG  
AAGTCTCCCTACACCCACCAGGCCAAGCCCTCTGTGATTCTGAGACTTTGCATGTGTAGTTACTTCTCCTGAAAT  
GGCCTTCCCTCCCATTCCTGCCAATCCAGGTCTTATCATCCTTCAGGTTGTCTTAAATGTATCCAGGTGTGTG  
TATTTTTATGTAATCCTTGTATGATATTAAGCGGAGATGTGGCATTGTTTCATTAAATTTGTAGACATATTCAGTA  
ACCATACTGAATACATATAATGACTATGTGCCAGCATTTCCGTATGTGCAAGAAGTTCATCAATAGATATAGACT  
CAAAGAGCTCTGTCATCAAGCTGTTGTTCTGAAGAGCAGAAGGATAC

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**FIGURE 2300**

CAAGCTTATGCATGCGGCCGCTGAATGGAGGCCAACATGCCGAAGCGGAAGGAGCCCGGCAGGTCTCTCCGCATC  
AAAGTCATCTCCATGGGCAACGCCGAAGTGGGGAAAAGCTGTATTATAAAGCGATACTGTGAGAAAAGATTTCGTG  
TCTAAATACCTGGCAACAATTGGAATTGACTATGGAGTCACAAAGGTACACGTCAGAGACAGAGAAATCAAAGTT  
AACATCTTTGATATGGCTGGACATCCCTTCTTCTATGAGGTTTGAATGAGTTTTACAAGGACACACAGGGTGTG  
ATACTGGTCTATGATGTTGGGCAGAAAGACTCCTTTGACGCCCTTGATGCGTGGCTGGCAGAAATGAAGCAAGAG  
CTTGGACCTCATGGAACATGGAATAATTATATTTGTAGTTTGTGCCAACAAGATTGATTGTACCAAACATCGC  
TGTGTAGATGAAAGTGAAGGACGTCTTTGGGCTGAAAGCAAAGGGTTCCTGTACTTTGAACTTCAGCACAACT  
GGAGAAGGCATTAATGAGATGTTCCAGACCTTTTATATATCCATAGTTGATTTATGTGAAAATGGCGGGAACGC  
CCTACCACCAATAGCAGTGCTAGTTTCACCAAAGAACAAGCAGATGCCATTTCGCAGAATTCGAAATAGTAAAGAC  
AGTTGGGACATGCTGGGAGTCAAACCTGGGGCCTCAAGGGATGAAGTCAATAAAGCGTATCGGAACTTGCTGTG  
CTTCTTCACCCTGACAAATGTGTAGCACCTGGCAGTGAAGATGCCTTCAAAGCAGTTGTGAATGCTCGGACAGCC  
CTCCTGAAAAACATCAAGTAGAAAGTACAGAAAAAGCCACATGTGGGACTCAAATGCAACAGACTTTCCCTAG  
AGGTGAAATAACCAACGTGGAGTTTTCTTCCAGAATCTCACTGCTCTTTTCATTTCATGTGTTGTCATTTGTAT  
ATCAGTAATTCAGGTACCCATTTTCATAGACATTTTACTGAGAAATGACCTGCATTTGTATGAAGTGAAGTGAAGC  
TCACACCCTGTACTTCATTTCATATTTCTAGATAATTCTGAATTTTTTCTCATTTCGTGAGCTCTGTAATTATAG  
TATCACTTAGACATTTCACTTGGGGAAATCCACAAGGTTCTTGGAGGGAGGGAAGAGAGGACAAGAGGACCCCTT  
CACTTTTTCTTTTTTACGGAATTCATCATCAGAGAAGAAAATAACAAAAATGGAAGCAAACAACATCAGAACCCC  
TGTAAGTTTGGTGTGACCTTACAGACAAGTTGCTGCTTTTACAATGAGTTCCTTAGGTGGTATTTTAACCCATCG  
ATCTATAATGATGACTCTTGGCAGCCCTTTGGGAGTTTGTAAAATGAGGTGATACAGTTCTGAATTGAGCATTCC  
TTTATGATATTCACTCTGTTCTCTTCTGCAGCCACCAGTGGGAGAGACAAGCCAGTCTTAAGAGAAAAGGTGGT  
GGCAGCCACAAATTCTAGGTACACTGGCTGCTGCCTATCCTGTCCCTGGATCTGAGGCCTTTCCCTTGCCATAGA  
AATGGTTGCTGGTAGCAGTAGAGAGCACTGTGCACCTGGGAATGAGGAATCAGGCCCAAGACAGAAGTACTTGG  
AGGAGCCAGCTGCAGTAGTATCCGCCTGTAGTCCCAGCTACTCAGGAGGCTGAGACAGGAGGATTGCTTAAGCCC  
AGGAGCTCAAGTCCCACCTGGGCAACATAGTAAGATCTTGTCTCTTAAAAAAAAAAAAAAAAA

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**FIGURE 2301**

MEANMPKRKEPGRSLRIKVISMGNAEVGKSCI IKRYCEKRFVSKYLATIGIDYGVTKVHVRDREIKVNIFDMAGH  
PFFYEVRNEFYKDTQGVLVYDVGQKDSFDALDAWLAEMKQELGPHGNMENI IFVVCANKIDCTKHRCVDESEGR  
LWAESKGFYFETSAQTGEGINEMFQTFYISIVDLCENGKKRPTTNSSASFTKEQADAIRRIRNSKDSWDMLGVK  
PGASRDEVNKAYRKLAVLLHPDKCVAPGSEDAFKAVVNARTALLKNIK

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**FIGURE 2302A**

ATAGTCACCAGAAGCTGGAAGAGTCAAAGGACACATTCTCCCTCAAGCCCCAGTGGGAGCACGGCCAGCTGGA  
TTTTGGACTTCTGGCCTCCAGAACTAGACAGGGCCTCAGGTGTCAACCAGGGTGGAAATACAGTGGTGTGATCAT  
AGCTCACTGCAGCCTGGAATTCCTGGGCTCAAGCAACCTGCCACCTCAGCCTTCCAAGTAGCTAGGACTACAGA  
ACATCCATGATAGCAGTCTTCTGTAAATCGAACTTTTCAAGAATTCTCTGAAGGAACCAAGTAGGATATTCTTAC  
ATCATGACTTAATGTGAATGCAAGAACAAGAAATAGGTTTTATCTCTAAATATAATGAAGGGCTGTGTGTAACA  
CTGACCCTGTCTCAATTCTAACAAGCATTCTAGACATGAGTTTACATCGGCAAATGGGTTCAGATCGAGATCTTC  
AGTCTCTGCTTCATCTGTGAGCTTGCCTTCAGTCAAAAAGGCACCCAAAAAAGAAGAATTTCAATAGGCTCCC  
TGTTTTCGGAGGAAAAAGATAACAAACGTAAATCAAGGGAGCTAAATGGCGGGTGGATGGAATTGCAAGTATTG  
AAAGTATACATTCTGAAATGTGTACTGATAAGAACTCCATTTCTCTACAAATACCTCTCTGACAATGGATTAA  
CTTCCATCAGCAACAAATTGGAGACTTCATAGAGTGCCTTTGTGCCTTTGCGGCATTCTAAAGACAGATTTTC  
CTGATATAATGACTTGTCTACAGATCTTGTGTGGATTGCTTACGACAATATTTAAGGATAGAAATCTCTGAAA  
GCAGAGTTAATATTAGTTGCCAGAATGTACTGAGCGGTTAATCCCCATGATATTGCTTGATATTAAGTGATG  
ATGTCTTGATGGAAAAATACGAAGAATTTATGCTTAGACGGTGGCTTGTTCAGATCCTGATTGTAGGTGGTGTG  
CAGCTCCAGACTGTGGATATGCTGTGATAGCATTGGATGTGCCAGCTGTCCAAATTAACCTGTGGGCGAGAGG  
GCTGTGGAACAGAGTTTTGCTACCACTGTAAACAGATTTGGCACCCCAACCAGACCTGTGATGCTGCTCGACAAG  
AGAGAGCCCAGAGCTTACGTTTGAGAACTATACGTTCTTCATCCATTAGTTATAGTCAAGAGTCTGGAGCAGCAG  
CTGATGATATAAAGCCATGTCCACGATGTGCTGCTTATATAATAAAGATGAATGATGGGAGCTGCAATCACATGA  
CATGTGCTGTTTGTGGTTGTGAGTTTTGTGGTTGTGTATGAAAGAAATCTCAGATTTGCATTATCTAAGTCCAT  
CAGGATGTACTTTTTGGGGGAAGAAACCCTGGAGCCGAAAGAAGAAATATTGTGGCAACTGGGAACACTGGTTG  
GTGCTCCTGTGGAATCGCTTAAATAGCTGGCATTGCTATTCCTGCAATGATTATTGGCATTCTGTGTATGTGG  
GCCGCAAGATTACAAATCGCTATGAAGGCAAGGATGTTTCAAAGCACAAACGGAATTTGGCCATAGCAGGTGGTG  
TAACGTTGTCTGTAATCGTGTCTCCAGTAGTAGCTGCAGTGACTGTAGGTATCGGTGTTCTATTATGTTAGCTT  
ATGTCTATGGCGTAGTTCCAATTTCTCTTTGTGCGAAGCGGAGGTTGTGGAGTCTCAGCAGGCAATGGAAGGAG  
TTAGGATTGAATTTGATGATGAAAATGATATAAATGTTGGTGGAACTAACACAGCTGTAGACACAACATCAGTAG  
CAGAAGCAAGACACAACCCAGCATAGGGGAGGGAAGTGTGGTGGGCTGACTGGCAGTTTGAGTGCAAGTGGAA  
GCCACATGGATCGAATAGGAGCCATCCGAGACAACCTGAGTGAAACGGCCAGCACCATGGCACTAGCTGGAGCCA  
GTATAACGGGGAGTCTGTCTAGGAAGTGCCATGGTAAACTGTTTTAACAGGTTGGAAGTACAAGCAGATGTACAGA  
AAGAACGGTACAGTCTAAGTGGAAGTCTGGCACAGTCAGCTTGGGAACAGTTAGTGATAATGCCAGCACCAAG  
CAATGGCAGGATCCATTCTGAATTCCTACATCCCATTGGACAAAGAAGGCAACAGTATGGAGGTGCAAGTAGATA  
TTGAGTCAAAGCCATCCAAATTCAGGCACAACAGTGAAGCAGTAGTGTGGATGATGGCAGTGCCACCCGAAGTT  
ATGCTGGCGGTTTCATCCAGTGGCTTGCCTGAAGGTAAATCTAGTGCCACCAAGTGGTCCAAAGAAGCAACAGCAG  
GGAATAATCAAAGTGGTAAACTGAGGAAAAAGGGTAACATGAAGATAAATGAGACGAGAGAGGACATGGATG  
CACAGTTGTTAGAACAACAAGCACGAACCTCAAGTGAATTTGAGGCTCCATCCCTCAGTGACAGTATGCCTTCTG  
TAGCAGATTCTCACTCTAGTCATTTTCTGAATTTAGTTGTTCTGACCTAGAAAGCATGAAAACCTCTTGTAGTC  
ATGGTTCCAGTGATTATCACACCCGCTTTGCTACTGTAAACATTCTTCTGAGGTAGAAAATGACCGTCTGGAAA  
ATTCCCACATCAGTGTAGCATTCTGTGGTTACCCAACTGCTTCTGTTGAGAGTTTCACAGTTGAATCATA  
TTGCTGAAGAACATGGTAACAATGGAATAAAACCTAATGTTGATTATATTTTGGCGATGCACTAAAAGAAACAA  
ATAACAACCACTCACATCAGACAATGGAATTAAGTGTGAATTCAGACTGAAATTTAGGCCATAAATGCTGCA  
GAATAATTACCACTGTACAACCGTGTGGAGCTGGTTGAATACATGTGACTACTTAAGTTTCAGGTTACCAGC  
AAAAGCCGGTTTCATTATCATAATGCAGATACATTTCTGTGTTGAGCAAGGCATTGTGTGTCATGTGGATCTT  
AGTTACCAAACATGAAGTGAAGGCTTTAAAGTGCATTATTTAAGGATAATAAATTTGAAGAGCAAAGCATGT  
TTTGTGTGTTTGGCACAACCAATTGCTTGAAGCACATACTTAGATAGAAATTGGTCTTAATTTATATAATCAATA  
TAAATACTAATGCAATTCTACAGCATTCAAATGAAGAAAACCTGAGGCTTTAGGGATAAGTGGTTAGTGATATT  
TTATTGAAACCACTAAAGAGATAAGTTTAAAGAACTGCATAGGTTACTCTCAGTATATGATACTCTGTAACATT  
TCTATTTATATCGGCATAAATTTCAATTTTTTCTCATATGCAATGTGGTTATATAAAGCTTAATGCAGCTCAT  
TTGCTACCAATTTGGATACTTAGACACTTTGAGCAAGATTGTGGCAGTTTTTGCACACTTTGAAATAGAAATACC  
TGGTACTCTATCTTGTATTGTTGATGCCATCTTAGAGGAAAAATGTAAAGTAAGTAATTAAGCATATGACA  
GCAACAAATAAGATACATAAACTACAAAATAAAGTCCCATTAGGTTATAAGTATTACAAAAATCCACCTTCT

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**FIGURE 2302B**

CTAAGGGGAAGTTTGTACCCCATGATTCTTGGTGCCCTTTGGGATCGACTGGGTTTTAATGGCCTAGTTATTTGA  
GGATTTTGCTGTGTTGTTTTCCATGTCTTCTCTGGTCACCTTGGATTATATATAAAAATACAGGAAATAGATAAA  
CATGAATGTGATTAATAATGCTGAAAAAGTATTAGCCTACCAAAGACACACTCAGGCTTTAGTGAATAACTTTAC  
ATAACCTCAGTTTTTAACACATGCATATCTTCTCCAACCATGAAATCAAAGCACGGTGCAGAACTTGTACCAAGT  
ACAAAAGGTCCATGTATGATTAGCATTATTTTCTTTTGCTTTTGTATGGACAATGTTTCAGCTGACATAAGCAG  
AAGTTGGCCAAAATACTGCCTGTACTGTTAATTTCTGTATAATTCACCTAAATAAAAGCAGGTTAACCTCAATG  
ATAGCAGTTAAAATGTTCTATCTTATGTATTTCTTTAAGTATTACCATTATGGTGCTACTGAGCGTTTTCTTTT  
GGTAAAAGAAAAATGCCATGGGCTGCAGTCTTCTCCATCACTTTCCCTACCAGGTCCATTAAATATGCTTATA  
ACACTAGTGCCAGTTATTTATTTGATAATGCTTATGGTATTTGTATATTTGTTTGCATTCCAATTTGTTTAAAT  
AATGAGTGTGTAAACTGCATACGTTAAATAAATGTAAATACTAATGTACTGCTGCAAAAAAAAAAAAAAAAAAAA  
AAAAAA



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**FIGURE 2303**

MQEQEIGFISKYNEGLCVNTDPVSILTSILDMSLHRQMGSDDRLQSSASSVSLPSVKKAPKKRRISIGSLFRRKK  
DNKRKSRELNGGVDGIASIESIHSEMCTDKNSIFSTNTSSDNGLTISISKQIGDFIECPLCLRHSKDRFPDIMTC  
HHRSCVDCLRQYLRIEISESRVNISCPECTERFNPDIRLILSDDVLMKEYEEMLRRLVADPDCRWCPAPDCG  
YAVIAFGCASC PKLT CGREGCGTEFCYHCKQIWHPNQTCDAARQERAQSLRLRTIRSSSISYSQESGAAADDIKP  
CPRCAAYIIKMNDGSCNHMTCAVCGCEFCWLCMKEISDLHYLSPSGCTFWGKKPWSRKKIILWQLGTLVGAPVGI  
ALIAGIAIPAMIIIGIPVYVGRKIHNRYEKDVSKHKRNLAAGGVTL SVIVSPVVA AVTVGIGVPIMLAYVYG VV  
PISLCRSGGCGVSAGNGKGVRIEFDENDINVGGTINTAVDTTSVAEARHNPSIGEGSVGGTLGSL SASGSHMDRI  
GAIRDNLSETASTMALAGASITGSLSGSAMVNCFNRLLEVQADVQKERYSLSGESGTVSLGTVSDNASTKAMAGSI  
LNSYIPLDKEGNSMEVQVDIESKPSKFRHNSGSSSVDDGSATRSYAGGSSSGLPEGKSSATKWSKEATAGKKS  
GKLRKKGNMKINETREDMDAQLLEQQSTNSSEFEAPSLSDSMPSVADSHSHFSEFSCSDLESMTSCSHGSSDY  
HTRFATVNILPEVENDRLENSPHQCSISVVTQTASCSEVSQNLNHIAEEHGNNGIKPNVDLYFGDALKETNNNHSH  
QTMELKVAIQTEI

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**FIGURE 2304**

GGCTCTGGGCATCACCAGCGGCCCCAGGGAAAAAGAAAGAAATGGGAAACAGCATGAAATCCACCCCTGCGCCTG  
CCGAGAGGCCCCCTGCCCAACCCGAGGGGACTGGATAGCGACTTCCTTGCCGTGCTAAGTGACTACCCGTCTCCTG  
ACATCAGCCCCCGATATTCCGCCGAGGGGAGAACTGCGTGTGATTCTGATGAAGGGGGCTGGTGGAAAGCTA  
TTTCTCTTAGCACTGGTCGAGAGAGTTACATCCCTGGAATATGTGTGGCCAGAGTTTACCATGGCTGGCTGTTTG  
AGGGCCTGGGCAGAGACAAGGCCGAGGAGCTGCTGCAGCTGCCAGACACAAAGGTCGGCTCCTTCATGATCAGAG  
AGAGTGAGACCAAGAAAGGGTTTTACTCACTGTCGGTGAGACACAGGCAGGTAAAGCATTACCGCATTTCCTGTC  
TGCCGAACAACCTGGTACTACATTTCCCCGAGGCTCACCTTCCAGTGCCCTGGAGGACCTGGTGAACCACTATTCTG  
AGGTGGCTGATGGCCTGTGCTGTGTGCTCACCACGCCCTGCCTGACACAAAGCACGGCTGCCCCAGCAGTGAGGG  
CCTCCAGCTCACCTGTACCTTGGCTCAGAAGACTGTGGACTGGAGGAGAGTGTCCAGACTGCAGGAGGACCCCG  
AGGGAAACAGAGAACCCGCTTGGGGTAGACGAGTCCCTTTTTCAGCTATGGCCTTCGAGAGAGCATTGCCTCTTACC  
TGTCCTTGACCAGTGAGGACAACACCTCCTTTGATCGAAAGAAGAAAAGCATCTCCCTGATGTATGGTGGCAGCA  
AGAGAAAGAGCTCATTCTCTCATCACCACCTTACTTTGAGGACTAGCCAAGAACAGACACAATGGTTCATGCCC  
AAAAGGAACAGAAGTTCCAATATTGCCTGGGATCTTGCAGAAAGCGAGGTTCCCTGATCCCTGGGAGCCTCACG  
TATTTTAGAAGCCAAGAGAAGCCACATGGAGACTCAAATTCGCATCTTCTCTATCCACATCATGACCAAAGGAAC  
CCCTCCCTGGTGTCTGATCAGGGCTGTGGCATCACAAAACATTGGATCATGACATGTGCGGCGATGCTTGAAAA  
GCCCAGCATGTATGTATGCACACATTGTGTGTGTGGGAAGGACAAAGCCACTCTCACAAGAAAGGGCACCAGGAC  
TGCTCTCAAGGAAGTGGACCTGTCCAGACAGTTACACTCCAAGGTCATTGGAGAGAACTTCTGTATGGCAAGC  
CTGAGAGGGAGAGGAAACAAAAGCTGTGTCTTGGCAGAAAGTCTGGGTTTGCAGATGGGTGCCCTGAATGGAAGT  
ACTTTAACTAATCCATAGGACTTCTGGTATGCTTTTCTCTCTTTTAAAGGAAGTTCGTGACACTAAACATTAG  
CCCAAAGGACTTCTTAGCCTTCAATTGGGAGATACCTTTGGTCTGCTCCTGCACCAAAGCCATATGGGTGGAAGT  
CAGTTGGCCTCCCTGGTTCTGCAGAGGGCCAGAAGAATGAGAGAGAGGAAGACTGCTGGCAGGGAAATCGAGGAG  
GCGAGACTAGAACTGCACCAGCTTCCCTGTATGTCTGCAGCCATGGCTTTGCAGCGCAAACAGAACTTCTCTGGGA  
TGCTGGGATTCCTTGCCGTATGAATGCATCAAGTATTCAATTATTGCCCGAATAGGCATTGCATTAAGTCCCTCTG  
TTAGGTGTGAGGCAAGCCAAAAAAGATGCTAAGTCCTAACCCCAACAGAAGTGTTCACAGTGTAGA  
CGGGAAAAATGTATAAACAAATGTGTAAAAAGAGAAATCAGCTCATGGCTTAGGATGGAATTAGAGACAGGTGA  
GGGACACTCAGGAGCTCATTTTCCAGCTGCTCTTCAGAGTGGAAGGGCTGGCTGGATCGGGTAGGTAAGAATAGC  
TGGATTTTTTAGAAAAGAAATGGATACAGTCTAAAGAATTAAGTCAACCCGGTACTTTATTCTAAGAAGGGTCTGG  
CATCCATATGAGGAAAAATGCTCAGCTCCAGGAAAGATGGGGAGTCCAAGTGGATTAATGATGTATGCATAATT  
TTAAGAGACAAGGGAGAAAACACAATGTATAGCCAGAGAAGGAGAAGCTCCCATCCAAATCCTACTAGGAAGAGA  
GTGGGCTGCAGATGAATCTGTGACTCATGTTTCCCTGTTTCAAAGGGATCCTGGGGAAGGAGGGGAACATGCTTG  
CAGTATCTCTCCCTGTCTGTCTGCTCACATAAGCATTCCGTCCATCTAAGCTCATCGTGTACTGGTATGTGTAT  
GTGCAGTTACACAGTTTCCCTGTATCATAAATCCTAGTGTGTTTATACAAGGAGACATCTGTGGTTTCCCCAACCG  
TTCCAAAAGGCTATTTCAAAGGAACCCAGCCACGTATGAGAAATGAATGTAACTGTGGACATTGACTTCCCGC  
ATAAGGCAGGGTGACCCCTGAATCCAGATGTTTGACAGTATCTTATGTGTGTTTCCGTGTGACGAATGT  
GATTGGAACATTTGGGGAGCACCAGAGGGATTTTCAGTGGGAAGCATTACACTTTGCTAAATCATGTATTTAT  
TCCTGATTAAAAACCACTAATAAATATTTAACCTTGGC

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**FIGURE 2305**

MGNSMKSTPAPAERPLPNPEGLDSDFLAVLSDYSPDISPPIFRERGEKLRVISDEGGWWKAISLSTGRESYIPGI  
CVARVYHGWLFEGLGRDKAEELLQLPDTKVGSFMIRESETKKGFYLSVRHRQVKHYRIFRLPNNWYYISPRLTF  
QCLEDLVNHYSEVADGLCCVLTPCLTQSTAAPAVRASSSPVTLRQKTVDWRRVSRLOEDPEGTENPLGVDESLE  
SYGLRESIASYLSLTSEDNTSFDRKKKSISLMYGGSKRKSSFFSSPPYFED

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**FIGURE 2306A**

GCGCGCCTGTGCGGGTGGTGGGTGCAGGACTGGACCCACGGGCCCATTTGTGCGCCCGCCGCGGCAGCCAGGACC  
ATGTGGGTGAACCCGGAGGAGTGTGCTGGCCAACGCGCTGTGGATCACCAGAGGGGCCAACCATACTTCATC  
CTGCAGCGGAGGAAGGGCCACGCCGGCGATGGAGGCGGCGGCGGCGGACTGGCGGGCCTGCTGGTGGGTACCCCTT  
GATGTTGTGTTGGACTCCAGCGCCCGGGTCGCTCCTTACCGAATCTGTACCAGACTCCAGACTCCCTGGTCTAC  
TGGACCATCGCCTGTGGTGGTTCAGGAAAGAAATCACTGAACACTGGGAATGGCTTGAGCAAAATCTCTTGAG  
ACACTCTCCATCTTTGAAAATGAGAATGATATCACCACATTTGTGAGAGGAAAAATACAGGGCATCATTGCAGAA  
TACAACAAATCAATGATGTAAAGGAAGATGATGACACGGAGAAGTTTAAAGAAGCCATTGTGAAATTTTCATAGG  
CTGTTTGGGATGCCAGAGGAAGAGAACTCGTCAACTATTACTCTTGACGCTATTGGAAGGGGAAGGTCCCCCGT  
CAGGGTTGGATGTACCTCAGCATTAAACCACCTTTGCTTTTATTCTTTCTTATGGGAAGGGAAGCGAAACTGGTC  
ATCCGGTGGGTAGACATCACTCAGCTTGAGAAGAATGCCACCCTGCTTCTGCCTGATGTGATCAAAGTGAGCACA  
CGGTCCAGTGAGCATTCTTCTCTGTATTCTCAACATCAACGAGACCTTCAAGTTAATGGAGCAGCTTGCCAAC  
ATAGCCATGAGGCAACTCTTAGACAATGAGGGATTGAACAAGATCGATCCCTGCCCAAACCTCAAAAGGAAATCT  
CCTAAAAAAGTGTCTGCTCTAAAACGTGATCTTGATGCCAGGGCAAAGAGTGAGAGATACCGTGCACCTTTTCCGG  
CTGCCCAAAGATGAAAAATTAGATGGCCACACAGACTGCACTCTCTGGACTCCATTTAACAAAATGCACATTTTG  
GGGCAGATGTTTGTGTCCACAAATTACATCTGTTTTACCAGCAAGGAGGAGAAGTTATGTAGCCTCATTATCCCG  
CTCCGTGAGGTGACAATTGTGGAAGGAGCAGAGCTCCAGTGTGCTCCCCAGTCCCTTATCCATCAGCACCCGA  
AACAGGATGACCTTCCTATTTGCCAACTTGAAAGATAGAGACTTTCTAGTGACAGGATCTCAGATTTCTTGCAA  
CAGACTACTTCCAAAATATATTCTGACAGGAGTTTGACAGGAAGTTACAACAGTTTTCAGATGATGAGGTGACTCT  
CGACCCAGCAGCCTCGTCTCCTCCAGCCCCAGAGAAGCAGAGCTCTGATGCTGATGGAGAGCGCCAGTTTAAAC  
CTAAATGGCAACAGCGTCCCCACAGCCACACAGACCTGATGACCATGTATCGGCGGCGGTCTCCCGAGGAGTTC  
AACCCGAAATTGGCCAAAGAGTTTCTGAAAGAGCAAGCCTGGAAGATTCACTTTGCTGAGTATGGGCAAGGGATC  
TGCATGTACCGCACAGAGAAAACGCGGGAGCTGGTGTGAAAGGGCATCCCGGAGAGCATGCGTGGGGAGCTCTGG  
CTGCTGCTGTGAGGTGCCATCAATGAGAAGGCCACACATCCTGGGTACTATGAAGACCTAGTGAGAAAGTCCATG  
GGGAAGTATAATCTCGCCACGGAGGAGATTGAGAGGGATTACACCGCTCCCTTCCAGAACACCCAGCTTTTCAG  
AATGAAATGGGCATTGCTGCACTAAGGAGAGTCTTAACAGCTTATGCTTTTCGAAATCCCAACATAGGGTATTGC  
CAGGCCATGAATATTGTCACTTCAGTGTGCTGCTTTATGCCAAAGAGGAGGAAGCTTTCTGGCTGCTTGTGGCT  
TTGTGTGAGCGCATGCTCCCAGATTACTACAACACCAGAGTTGTGGGTGCACTGGTGGACCAAGGTGTCTTTGAG  
GAGCTAGCACGAGACTACGTCCCACAGCTGTACGACTGCATGCAAGACCTGGGCGTGATTTCCACCATCTCCCTG  
TCTTGGTTCTTCACACTATTTCTCAGTGTGATGCCTTTTGAGAGTGCAGTTGTGGTTGTTGACTGTTTCTTCTAT  
GAAGGAATTAAGTGATATTCCAGTTGGCCCTAGCTGTGCTGGATGCAATGTGGACAACTGTTGAAGTGAAG  
GATGATGGGGAGGCCATGACCGTTTTGGGAAGGTATTTAGACAGTGTGACCAATAAAGACAGCACACTGCCTCCC  
ATTCTCACCTCCACTCCTTGCTCAGCGATGATGTGGAACCTTACCCTGAGGTAGACATCTTTAGACTCATCAGA  
ACTTCTACGAGAAATTCGGAATATCCGGGCAGATTGATTGAACAGATGAGATTCAAACAGAGACTGAAAGTG  
ATCCAGACGCTGGAGGATACTACGAAACGCAACGTGGTACGAACCATTTGTGACAGAACTTCTTTTACCATTGAT  
GAGCTGGAAGAACTTTATGCTCTTTTCAAGGCAGAACATCTCACCAGCTGCTACTGGGGCGGGAGCAGCAACGCG  
CTGGACCGGCATGACCCAGCCTGCCCTACCTGGAACAGTATCGCATTGACTTCGAGCAGTTCAAGGGAATGTTT  
GCTCTTCTTTTCTTGGGCATGTGGAACCTCACTCTGACGTTCTGGCCTCCCGCTTGTTCCAGTTATTAGATGAA  
AATGGAGACTCTTTGATTAACTTCCGGGAGTTTGCTCTGGGCTAAGTGTGCTGATGCCATGGGGACCTCACAGAG  
AAGCTCAAACCTCTGTACAAAATGCACGCTTTCCTGAGCCATCCTCTGATCAAGATGAACAGATTCTGCTTTT  
GAAGCAACTCAGTACTTCTTTGAAGATATTACCCAGAATGTACACATGTTGTTGGATTGGATAGCAGAAGCAAA  
CAGGGTGCAGATGATGGCTTTGTTACGGTGAGCCTAAAGCCAGACAAAGGGAAGAGAGCAAAATCCCAAGAAAAT  
CGTAATTATTTGAGACTGTGGACTCCAGAAAATAAATCTAAGTCAAAGAATGCAAAGGATTACCCAAATTAAT  
CAGGGGCAGTTTCACTGTAAGACAATGTATAACATGTTACGCGAAGACCCCAATGAGCAGGAGCTGTAC  
CATGCCACGGCAGCAGTGACCAGCCTCCTGCTGGAGATTGGGGAGGTCCGCAAGTTGTTTCGTGCCCCAGCCTGCA  
AAGGAGGGCGGGAGCGGAGGCAGTGGGCCGCTCCTGCCACCAGGGCATCCAGGCGTGCTCTTCCCAAGAAAGGG  
CCAGGCCAGCCTTACGTGGTGGAGTCTGTTGAGCCCTGCCGGCCAGCCTGGCCCCGACAGCGAGGAACACTCC  
CTTGAGGACAAATGGAGGACATCAAGCTGGAGGACTCCTCGCCCCGGGACAACGGGGCCTGCTCCTCCATGCTG  
ATCTCTGACGACGACCAAGGACGACAGCTCCATGTCTCTACTCTGCTGAGTGCCGGCTCCACGAGGAG

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**FIGURE 2306B**

GACAAGCTGCACTGCGAGGACATCGGAGAGGACACGGTCCTGGTGCGGAGCGGCCAGGGCACGGCGGCACTGCCC  
CGGAGCACCAGCCTGGACCGGGACTGGGCCATCACCTTCGAGCAGTTCTTGGCCTCCCTCTTAACTGAGCCTGCC  
CTGGTCAAGTACTTTGACAAGCCCGTGTGCATGATGGCCAGGATTACCAGTGCAAAAACATCCGGATGATGGGC  
AAGCCCCCTCACCTCGGCCAGTGACTATGAAATCTCGGCCATGTCGGGCTGACACGGGCGCCTTCCGGGGGAGTG  
GGAGGAGAGGGAGGGGAGGGATTTTTATGTTCTTCTGTGTTGAGTTTTTCTTCTTTCTTTTAAATTAAATAT  
TTATTAGTACCTGGCTTGAAGCCTAGTGTTTTTATAATGTAATTCAATGAAAACCTGTGGAGAAATATTTAAACA  
CCTCAATGTAGGTACATTACACTCTTGTGCGGGGAGGGGATTTACCAGAATACAGTTTATTTCTGTAATTCTAA  
AAAACAAAAAGATGAATCTGTCAGTGATATGTGTATTATAACTTATTAATCTTGCTGTTGAGCTGTATACATG  
GTTTAAAAAATAGTACTGTTTAAATGCTAAGTAAGGCAGCAGTCATTGTGTATTCAGGCTTTTTAAATAAAATTA  
GAGCTGTAAGGAAATGAAAAGCCACAAATGCAAGACTGTTCTTAAATGGAAGGCATAGTCAGCGAGGGTAAATC  
CTATACCACCTTTAGGAAGTATTAAAAATATTTTTAAGATTTGAAATATATTTCATAGAAGTCCTCTATTCAAAT  
CATATTCACAGATGTTCCCTTCAAAGGGAAAACATTTGGGGTTCTAAACAGTTATGAAAGTAAGTGATTTTTTA  
CATGATTCCAGAATAACACTTGTATTGACCAATTTAGACAGATACCAGACCAATTTGCATTTAAGAAATTGTTT  
TGATTATTTACGTCAACTCATTAGAATTCAGTGAAAAGTAACAGTCTTTTGTACAGAGAATCTGAAAGTAGCAG  
CAAAGACAGAGGGCTCATGACAGGTTTTTGCTTTTGCTTTTGCTTTTGTTTTTGAAAGAGTAAAAGTACTGATGCT  
TCTGATACTGGATGTTTAGCTTCTTACTGCAAAAACATAAGTAAAACAGTCAACTTTACCATTTCCGTATTCTCC  
ATAGATTGAAGAAATTTATACCACATATCGCATATGACCATCTTTCCATCAAATCAATGTAGAGATAATGTAAAC  
TGAAAAAAATCTGCAAGATAATGTAAGTGAATGTTTTAAAAACAGAACTTGTCACCTTTATATAAAAGAATAGTA  
TGCTCTATTTCTGAATGGATGTGGAAATGAAAGCTAGCGCACCTGCACCTTTGAATTCCTTGCTTCTTTTTTATTA  
CTGTTATGATTTTGCTTTTACAGATGTGGACGATTTTTCTTCTGATTGTTGAATTCATAATCATGGTCTCAT  
TTCTTTTGCTTCTTTGGAATATTTCTTTCAACACATTCCTTTATTTTATTATACATTGTTGCTTTTTTTTAGCTA  
TTGCTGCTGTTGTTTTTATTCTATTTACAGGATGATTTTTAAACTGTCAAATGAAGTAGTGTTAACCTCAAATA  
GGCTAAATGTGAACAAATAAAATACAGCAAATACTC

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**FIGURE 2307**

NLCSLIIPLEVTIVEKADSSSVLPSPSISISTRNRMFTLFANLKDRDFLVQRISDFLQQTTSKIYSDKEFAGSYN  
SSDDEVYSRPSSLVSSSPQRSTSSDADGERQFNLNNGNSVPTATQTLMTMYRRRSPEEFNPKLAKEFLKEQAWKIH  
FAEYGGQICMYRTEKTRELVLKGIPESMRGELWLLLSGAINKATHPGYYEDLVEKSMGKYNLATEEIERDLHRS  
LPEHPAFQONEMGIAALRRVLTAYAFRNPNIYGQAMNIVTSVLLLYAKEEEAFWLLVALCERMLPDYYNTRVVG  
LVDQGVFEELARDYVPQLYDCMQDLGVISTISLSWFLTLFLSVMPFESAVVVVDCFFYEGIKVIFQLALAVLDAN  
VDKLLNCKDDGEAMTVLGRYLDSTNKDSTLPPIPHLHSLLSDDVEPYPEVDIFRLIRTSYEKFGTIRADLIEQM  
RFKQRLKVIQTLEDITKRNVRTIVTETSFTIDELEELYALFKAHLTSCYWGGSSNALDRHDPSPYLEQYRID  
FEQFKGMFALLFPWACGTHSDVLASRLFQLLDENGDSLINFREFVSGLSAACHGDLTEKLKLLYKMHVLEPSSD  
QDEPDSAFEATQYFFEDITPECTHVVGLDSSRSKQGADDFVTVSLKPDKGKRANSQENRNYLRLWTPENKSKSKN  
AKDLPKLNQGGFIELCKTMYNMFSEDPNEQELYHATAAVTSLLLEIGEVGKLFVAQPAKEGGSGGSGPSCHQGIP  
GVLFPKKGPGQPYVVESVEPLPASLAPDSEEHSLGGQMEDIKLEDSSPRDNGACSSMLISDDDTKDDSSMSSYSV  
LSAGSHEEDKLHCEDIGEDTVLVRSGQGTAAALPRSTSLDRDWAITFEQFLASLLTEPALVKYFDKPVCMMARITS  
AKNIRMMGKPLTSASDYEISAMSG

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**FIGURE 2308**

ACCAACTAGAACTCCAATATAGTCTTCTGTTTTATGTCAATGCATTGCAATCAGATTCAGAATCCTAACAG  
GTAAATTGGAGTCTACGAAAATTTATAATAATTGCTTCATGGACTCTGAGCTATAGTCTATATCTTAGTTTTTT  
CAAACATTTTGACTATTTTGACCAAGCCAGCTTGCAAGTACAGAAAAAGTGAAAAATGTTTCTCCTTCTGAATGC  
ATTCTTACCACTTTGATTCTTTCTGTTTCTACTATCCATATAAATACTTTTCTGACCCTTTTGTTAGACAAGGAA  
AAGTTTCTTTGTTATTTTGTGTTAAATGTAAGGAATGAGACAGGCCAAACAGTGAAGATAAACAATAGATC

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**FIGURE 2309**

AGAGGGAAAGCGAGAGGGAGACGGACGTTGAGAGAACGAGGAGGAAGGAGAGAAAATGGCGTCCACGGATTACAG  
TACCTATAGCCAAGCTGCAGCGCAGCAGGGGTACAGTGCTTACACCGCCCAGCCCAGCTCAAGGATATGCACAGAC  
CACCCAGGCATATGGGCAACAAAGCTATGGAACCTATGGACAGCCCAGCTGATGTCAGCTATACCCAGGCTCAGAC  
CACTGCAACCTATGGGCAGACCGCCTATGCAACTTCTTATGGACAGCCTCCCAGTGGTTATACTACTCCAAGTGC  
CCCCAGGCATACAGCCAGCCTGTCCAGGGGTATGGCACTGGTGCTTATGATACCACCAGTGTACAGTACCCAC  
CACCCAGGCCTCCTATGCAGCTCAGTCTGCATATGGCACTCAGCCTGCTTATCCAGCCTATGGGCAGCAGCCAGC  
AGCCACTGCACCTACAAGACCGCAGGATGGAAACAAGCCCAGTGAAGTCAACCTCAATCTAGCACAGGGGG  
TTACAACCAGCCCAGCCTAGGATATGGACAGAGTAAGTACAGTTATCCCCAGGTACCTGGGAGCTACCCCATGCA  
GCCAGTCACTGCACCTCCATCCTACCTCCTACCAGCTATTCTCTACACAGCCGACTAGTTATGATCAGAGCAG  
TTACTCTCAGCAGAACACCTATGGGCAACCGAGCAGCTATGGACAGCAGAGTAGCTATGGTCAACAAAGCAGCTA  
TGGGCAGCAGCCTCCCAGTGTACCCACCCCAAGTGGATCCTACAGCCAAGCTCCAAGTCAATATAGCCAACA  
GAGCAGCAGCTACGGGCAGCAGAGACCCATGGATGAAGGACCAGATCTTGATCTAGGCCCTCCTGTAGATCCAGA  
TGAAGACTCTGACAACAGTGCAATTTATGTACAAGGATTAAATGACAGTGTGACTCTAGATGATCTGGCAGACTT  
CTTTAAGCAGTGTGGGGTTGTTAAGATGAACAAGAGAAGTGGGCAACCCATGATCCACATCTACCTGGACAAGGA  
AACAGGAAAGCCCAAGGCGATGCCACAGTGTCTTATGAAGACCCACCCAGTGGCAAGGCTGCCGTGGAATGGTT  
TGATGGGAAAGATTTTCAAGGGAGCAAACTTAAAGTCTCCCTTGCTCGGAAGAAGCCTCCAATGAACAGTATGCG  
GGGTGGTCTGCCACCCCGTGAGGGCAGAGGCATGCCACCACCACTCCGTGGAGGTCCAGGAGGCCAGGAGGTCC  
TGGGGGACCCATGGGTGCGATGGGAGGCCGTGGAGGAGATAGAGGAGGCTTCCCTCCAAGAGGACCCGGGGTTC  
CCGAGGGAACCCCTCTGGAGGAGGAAACGTCCAGCACCGAGCTGGAGACTGGCAGTGTCCCAATCCGGGTGTGG  
AAACCAGAACCTTCGCCTGGAGAACAGAGTGCAACCAGTGTAAAGGCCCCAAAGCCTGAAGGCTTCTCCCGCCACC  
CTTTCCGCCCCCGGGTGGTGATCGTGGCAGAGGTGGCCCTGGTGGCATGCGGGGAGGAAGAGGTGGCCTCATGGA  
TCGTGGTGGTCCCGGTGGAATGTTTACAGAGGTGGCCGTGGTGGAGACAGAGGTGGCTTCCGTGGTGGCCGGGGCAT  
GGACCAGGTGGCTTTGGTGGAGGAAGACGAGGTGGCCCTGGGGGGCCCCCTGGACCTTTGATGGAACAGATGGG  
AGGAAGAAGAGGAGGACGTGGAGGACCTGGAAAAATGGATAAAGGCGAGCACCGTCAGGAGCGCAGAGATCGGCC  
CTACTAG



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**FIGURE 2310**

MASTDYSTYSQAAAQQGYSAYTAQPTQGYAQTTQAYGQQSYGTYGQPTDVSYTQAQTTATYGTAYATSYGQPPT  
GYTTPTAPQAYSQPVQGYGTGAYDTTATVTTTQASYAAQSAYGTQPAYPAYGQQPAATAPTRPQDGNKPTETSQ  
PQSSTGGYNQPSLGYGQSNYSYPQVPGSYPMQPVTAAPPSPPTSYSSSTQPTSYDQSSYSQQNTYGQPSSYGQQSS  
YGQQSSYGQQPPTSYPPTGTSYSQAPSQYSQQSSSYGQQRPMDEGPDLDLGPPVDPDESDNSAIYVQGLNDSVT  
LDDLADFFKQCGVVKMNKRTGQPMIHIYLDKETGKPKGDATVSYEDPPTAKAAVEWFDGKDFQGSKLKVS LARKK  
PPMNSMRGGLPPREGRGMPPPLRGPGGPGGPGGPMGRMGRRGGDRGGFPFRGPRGSRGNPSGGGNVQHFRAGDWQ  
CPNPGCGNQNFARTECNQCKAPKPEGFLPPFPFPFGGDRGRGGPGGMRGGRGGLMDRGGPGGMFRGGRGGDRGG  
FRGGRGMDRGGFGGGRRGPGGPPGFLMEQMGGRRGGRGGPGKMDKGEHRQERRDRPY

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**FIGURE 2311**

AGACGCGCAAGGGCGCCGATGGAGGCAGACTCGCCAGCGGGCCCCGGCGCCCCAGAGCCCCTCGCGGAGGGAGCG  
GCGGCCGAGTTCTCCAGCCTGCTGCGCAGGATAAAAGGCAAACTCTTCACCTGGAATATTTTGAAAACAATTGCC  
CTGGGTCAGACGTTGTCCTTGTGTATATGTGGGACAGCCATCACCAGCCAGTATTTGGCAGAAAGATACAAAAGTG  
AACACCCCATGCTTCAGAGCTTTATCAATTATTGCTTGCTGTTCCCTAATTTATACAGTGATGCTGGCATTTCGA  
TCAGGCAGTGATAACCTTTTAGTAATCTTGAAAAGAAAATGGTGGAAGTACATCCTGCTGGGACTAGCAGATGTG  
GAAGCTAATTATGTGATCGTCAGAGCCTACCAGTACACAACCTCTAACCAGTGTCCAGCTTTTGGATTGCTTTGGG  
ATTCTGTGTTGATGGCTCTGTGATGTTTATTCTTCATGCAAGATACAGAGTGATCCACTTCATCGCCGTGGCT  
GTCTGTCTGTTGGGTGTAGGAACCATGGTTGGTGACACATACTAGCAGGGAGGGAAGACAATTCAGGGAGTGAT  
GTATTGATTGGTGACATCTTGGTCCTTCTTGGGGCTTCCCTCTATGCCATTTCAAATGTTTGTGAGGAATACATC  
GTGAAGAAGCTGAGCAGACAGGAGTTTTTAGGAATGGTGGGCCCTGTTTGAACAATTATCAGTGGTATACAGCTA  
TTGATTGTGGAATATAAGGATATTGCCAGCATTTCATTGGGACTGGAATAATTGCCCTGCTGTTGCTGGCATTTCGC  
CTGTGTATGTTTTGCCGTGACAGCTTCATGCCATTGGTGATTAAAGTCACTAGTGCCACTTCCGTCAACCTGGGC  
ATCCTGACAGCGGACCTCTACAGCCTTTTTGTGGACTCTTTCTGTTTGGCTATAAGTTTTCAGGACTCTACATC  
CTGTCTTCACTGTGTCATCATGGTGGGGTTTATCCTGTACTGCTCCACCCCTACTCGCACGGCCGAGCCGGCTGAA  
AGCAGCGTGCCTCCAGTCACCAGCATTGGGATTGACAACCTGGGGCTGAAGCTGGAGGAGAACCTCCAGGAGACC  
CACTCTGCTGCTTGTAGCTGGAGAAGATGGCGCACCCATCCCCACCAGGATAAAGCAGAGCCTGCTGCCTGCT  
GAGGGGACACTTGGGGAAATAGCAGACTCAGAATGGACACTCTACAACCTGGGTTGGATCCAGTGGTTAGGTTT  
TAGAAAGGAACACTGAACAAAGTTCAAAGTAGAAATACCAAAATAGAGCAGAAACCAAGCTAAGAGTGTGTTTC  
TGTGTTTGAGGACCAATATCTGTTGCTGTTGAGGAGATGAGGTGCAGACTCCACACTGGGGTCTTAGAGGCACCG  
GTGGGAAAGCAGGACTGGGGAGAGATCCAGGACTGAGCCAGCCTCAGGCCAGGGCGGGAAGCAGGCTGTCCAGG  
CTGGGCTTGGTGGTCAGGAACAGGGGCAGCTCACGGTGGCTCTGGAGTACGTTTCTCTGTGATGCTTCAAGG  
TTTTTTTTTTTTTTTTTTTTGCTGAGGCAGTTATTGTCCACAGGCCTTTGGGTACAGATGAGGCCTCGGGGCTG  
ACTGCATGTGGCAGAAAACGGGTGGGTGAGCCCTTGAAAAGTCTTGAGATATAAGTGTGAGTACTATACAAGCAT  
TAAACTGGAGTGCAGTAAACCTAGGAACCTTCCCACAATTGTTTTTTGTTTGTGTTGAGATGCAGAGTCTAGAGT  
GCAGTGGTGCAAGCTCAGCTTACTGTAACCTCTGCCTCCTGGATTCAAGTGTAGTAGCTGGGATTACAAAAGCA  
TGTGGCCCCACGCCCAGCTAAGTTTTGTATTTTTAGTAGACATGGGGTTTACCATGTTGCCAGGCTGGTCTTG  
ACCTCCCAGCCTCAAGTGATCTGCCTGCCCCGACCTCCCAAAGTGCTGGGATTACAGGCTTGAGCCACCGTGCCA  
GGCCTGTTTTGTTGTTTTGTAGAGAGATGGGGTTTCGCCATGTGCCCAGGCTAATCTCAAATTCCTGAGCTA  
AAGCGATCTGCCACCTCGGCCCTCCGAAAGTGCTAGGATTACAGATGTGAACCACTGTGCCTGGCCTGTTGTTT  
GTTTGTTTAAACATTTCTCCATCACTCATTCCAGGTCCCAGAGCAAACTCTCTGCTCTCGGAGCCTGTGACA  
CTGGCTATGTGCTCCACAGTTTCAGTCCCAGGTCATACTCTCCAACAGTTTTTCAGAGCTCCATATATATGTAGAT  
GCCATCCTTTCTAAAACTTCTCACGACCTCCTGGAATATTCTTATTGATCTCATTTTATTTAGCATCAGCTCAA  
GAACTAAGTCTTAGTGACAGTATCACAACAAAGAAAAGCTTTGTTTTATAACTGGTAAAAACAAGAAAAGA  
TTCTCATCAAAATGAAAATATAAAATTAATCATTCTCACCAAGAGTATGCCTGGGAGCCTCCAGCTGTAAAA  
GACAATGCTATTACTACTTCTTATCAAAAATCTGTAATGCCCTGTGATTTTTATGATACTTCTTCAATACAAAGT  
GTTAATATGTGTCATCAGTATAATAACAACCAACAAATGCCACTTTCAGAAAACGTATGTAAATTTTTTGTA  
CAATGTAAAAAAGAAATGGGGAGTAAGTGTTCACATCATTAAGGCTTTGAATTCATGGAAT

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**FIGURE 2312**

MEADSPAGPGAPEPLAEGAAAEFSSLLRRIKGLFTWNILKTIALGQTLSLCICGTAITSQYLAERYKVNTPMLQ  
SFINYCLLFLIYTVMLAFRSGSDNLLVILKRKWKYILLGLADVEANYVIVRAYQYTTLTSVQLLDCFGIPVLM  
LSWFILHARYRVIHFIAVAVCLLGVGTVMVGADILAGREDNSGSDVLIGDILVLLGASLYAISNVCEEYIVKKLSR  
QEFLGMVGLFGTIISGIQLLIVEYKDIASIHWDWKIALLFVAFALCMFCLYSFMPLVIKVTSAHSVNLGILTADL  
YSLFVGLFLFGYKFSGLYILSFTVIMVGFILYCSTPTRTAEPAESSVPPVTSIGIDNLGLKLEENLQETHSAVL

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**FIGURE 2313**

CATTAAAAATAAAGGGCATTACCCATATCATTCTCTGAGCTATACCAGTGGAGACACTGCCACTGATTCTCCAG  
TGCATGTTGGACGTGCTGGGATGCCAGTAAAGGACAGTCCAAGGAAGGAGAGCCTACTCAGCTACCTGACTGGAA  
GCTTCCCAAGCCTGCACAACCTCCTGGAAGGTACTCCTCAGAGAAGCAGTGCTGCTGTGAAAAGTAGCTCCCTAA  
CGAGAACAGGAAATACAGTAGCCACTGATATGTTATCTGAACATCCCTTGCTATCTGAGCCATCATCTGTGAGTT  
TCTATAATTGGATGTCAAATGCTGTGGGTAATCGAGGAAGTGTGTTACAAGAATCTCCTGTTACAAAATCAGGAC  
ACAATAGTCTTCCCACAGGTGTTGCACCCAATCTTCCAACAATACCCTCAGCCTCAGATTTCAACACTGTCTTGT  
CTAGTGACCAAAATACTTTGGATGGGACACATTCTCAGCATAGCACCAGTCAGGATGATGTGGCAGGTGTAGAAG  
AAGCAAACCAAGGGTTTCTGCTGTTTCAGCTTGCTGATGCACAGGTTGTTTTCAAGCCTCTTCTGAGTCATACAG  
GGATCCAGTCACAGGATACAATGCCATTCTGCTACCGAATGTACTTTGGAGAACACCTTTCAATTTTCAGGGACTT  
TGGACTGCCTCAGAGCAGATATTGTGGATTGAGACACAGCCAAAGAGAGAAAAGGCAAAGAGCAAGAAGGCAAG  
GCCATGTGAATCTTCTCCACTTGAGTTCAAACCAGCATTAAATGTTGGGAACCTTTAGCATCAGTGCTGTTGTAA  
TGGAAAAGTCCGTGTGCACCCCTCAGAACTCTACCACTGCCCCTTTCTTTTCATGATCTCAGCAAGCGGTATTATA  
ACACCTTTCACTGCAACTTTACTATTTCTGTCTAGTCAATAAGCCAGCATGTAGATATGGCTTTGGTTCGTCTTA  
TTCATCAGTTTAGCACAATGATAGATGACATCAAAGCAACTCAGACTGATATTAACTTAGCAGATATACAGCCG  
GATCTGCTTCCCCAACACCTACCTTCAAACCAGAAAACATCGGGACTTTCGTTTCATCTGACTTTAGCCGCAGTT  
CTAGAGGAAGTCTTAATGGTGGCAATAGAGTAAATAATGCAAAGAACAACCGACCAACAATGAGAATAACAAAA  
AGGAATCTCGAAACAAGAATTCATTAGGAAGATCTGAAAGAAGAACATCAAAGTGTCTAGGAAAGGTTCAAAG  
ATGTGGTGGATCACATGACTATTTCATATGGATGACTCTGATTCAATTACAGTGTGAGAACAAAGTGAGCCTTCAG  
CTGAGTGCTGGCAGAATATGTATAAATTGCTTAACCTTCTATTCACTTATCTCCGATCCAACAGGAATATTGGAAA  
AGTCTTCAGAAACATTTGGACCAGCAGGAGTTCGGAGCCCTACAGAGCCAACATGTAAAGTTGTGTTTGAGAATG  
AACAAGACAACAGCAGTTTGACTAAGACTCAGAGGAAACGTAGCTTGGTAACTTCTGAACCTCAGCATGTTACTC  
TAATAGTGTGTTGGGATTGGCATGGTGAACCGCACACACCTAGAGGCAGATATTGGTGGACTAACAAATGGAATCAG  
AACTGAAGAGGATCCATGGCAGTTTTACTCTTAAGGAAAAAATGAAAGATGTTTTACATCAAAAGATGACTGAGA  
CTTGCTGCTACTGCTCATATTGGTGGGGTTAATATTGTGCTGCTTGAAGGGATTACACCAAAATATACAACTGGAGG  
ATTTTCTACATCTCCTACAAGTACAGCCAAACAAGAGTTTCTGTATGTCATATTATCTTTTTTCATGGCTTTGTT  
AATTACTGTAGTATTGAATAGTTTTTAAAAATATTTAAATTTTTTTCATGGCTGTGAATTATTTAGTTATTGTTTT  
GTAGCTGTAATATAGGCCCTTTTATATAATAGATTAAAGCTTACTGGTAATCAAGGAAAAAAAAAAAAAAAAAAAA  
AAA

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**FIGURE 2314**

MPVKDSPRKESLLSYLTGSFPSLHNLLEGTPQRSSAAVKSSSLTRTGNTVATDMLSEHPLLSEPPSSVSFYNWMSN  
AVGNRGSVLQESPVTKSGHNSLPTGVAPNLPTIPASDFNTVLSSDQNTLDGTHSQHSTSQDDVAGVEEANQGFP  
AVQLADAQVVKPLLSTGTGQSDTMPFCYRMYFGEHLSFSGTLDCLRADIVDSDTAKERKKGKRARRQGHVNLPP  
LEFKPALMLGTFSISAVVMEKSVCTPQNSTALSFDLSKRYNTFHCNFTISCQSIHQHVDMALVRLIHQFSTM  
IDDIKATQTDIKLSRYTAGSASPTPTFKTRKHRDFRSDFSRSSRSLNGGNRVNNAKNKRTNNENNNKESRNKN  
SLGRSERRTSKVSRRGSKDVVDHMTIHMDDSDSITVSEQSEPSAECWQNMYYKLLNFYSLISDPTGILEKSSETFG  
PAGVRSPTTEPTCKVVFENEQDNSSLTKTQRKRSVLTSEPQHVTLIVFGIGMVNRTHLEADIGGLTMESELKRIHG  
SFTLKEKMKDVLHQMTETCATAHIGGVNIVLLEGITPNIQLEDFPTSPTSTAKQEFLYVILFFFMAL

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**FIGURE 2315**

ATAATTCACCTGGAAGTGTGACATAGATGTATCAAAGGGAGCATTGCTAGAAGGGCAGCTAGTGATTTCATAGAA  
GGATTAAATTCTAAGCACCAGGCAAATGCTCTTCATTGTGTAACTAGATGGAGTCTCACTCTGTTACCCAGG  
CCGGAGTGCACTGGCGCAGTCTCGGCTCACTGCAACCTCCACCTCCCAGGTTCAAGTGATTCTCATGCCTCAGTC  
CCCCGAGTAGCTGGGATTACAGATGCCCACCACCATGCCTGGCTAATTATGTTGCTTCTGCAAGCTGACTTGG  
GGTGGCATGGTCTCTAAGAAGTTCCTAAAAGAAATACAGTCCATACTGCCCAGGATCTCTGCAAAGCTGACTTGG  
ACTTCAGAGGAAGGCAGCTATTCTCAGGATATGACAGGGGTAAACCCCTTCCAGATGATTTTTGAGGTTGATGAA  
AAGCCCAGAACCTTGATGACAGATTGTCTGGTTATAAAGCATTTTTTACGTAAATCATCATGGTGCACCCTAAG  
GTCAGATTTTCATTTCAGTGTAAGGTAAATGGAATCCTCTCCACAGAGATCTTTGGGGTGGAGAATGAACCCACT  
TTGAACCTTGGGAATGGAATTGCTCTTTTGGTGCAGTCCCAGCATTATGTGAGACCAAATTTTGGTACAATTGAA  
TCACACTGCAGCAGAATTCACCCTGTGCTAGGACATCCAGTAATGCTTTTCATCCCTGAAGACGTGGCTGGCATG  
GACTTGTGGGAGAACTGATACTGACTCCAGCAGCTGCAGTGTGCCCCAGCCCAAAGGTTTTCTTCCAACCAGCTT  
AACAGGATTTCTTCAGTTTCCATATTTCTATATGGACCTTTGGGTCTGCTCTGATATTGTCAACTTGGGAGCAG  
CCGATGACTACTTTCTTCAAAGATACCTCTTCTTTAGTTGACTGGAAAAAATACCATTGTGTATGATACCCAAT  
TTGGATCTCAATTTGGATAGAGATTGGTGCTTCCAGATGTGAGTTATCAGGTGGAATCCAGTGAGGAGGATCAG  
TCTCAGACTATGGATCCTCAAGGACAACTCTGCTGCTTTTTCTCTTTGTGGATTTCCACAGTGCATTTCAGTC  
CAGCAAATGGAATCTGGGGAGTCTATACTTTGCTCACAACCTCATCTCAATGCCATCCTTGTGGAGAGCCACAGT  
GTAGTGCAAGGTTCCATCCAATTCACGTGTGGACAAGGTCTTGGAGCAACATCACCAGGCTGCCAAGGCAGCTGAC  
ACACAAGAGTTTCAGGACCAAACCTGCACAAAGTATTTTCGTGAGATCACCCAACACCAATTTCTTCACCACTGCTCA  
TGTGAGGTGAAGCAGCAGCTAACCCTAGAAAAAAGGACTCAGCCCAGGGCACTGAGGACGCACCTGATAACAGC  
AGCCTGGAGCTCCTAGCAGATACCAGCGGGCAAGCAGAAAAACAAGAGGCTCAAGAGGGGCAGCCCCCGCATAGAG  
GAGATGCGAGCTCTGCGCTCTGCCAGGGCCCCGAGCCCGTCAGAGGCCGCCCGCGCCCGGGAAGCCACCGCG  
GCCCCCTCACTCCTAGAGGAAGGGAGCACCGCGAGGCTCACGGCAGGGCCCTGGCGCCGGGCAGGGCGAGCCTC  
GGAAGCCGCTGGAGGACGTGCTGTGGCTGCAGGAGGTCTCAACCTGTCAGAGTGGCTGAGTCCCAGCCCTGGG  
CCCTGAGCCCGGTCCCCCTTCCGCAAGCGCCACCGATCCGGAGGCTGCGGGCAGCCGTTATCCCGTGGTTAATA  
AAGCTGCCGCGCTCACCAAAAAAAAAAAAAAAAAA

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**FIGURE 2316**

MVASAGSLFGGMVLKKFLKEIQSILPGISAKLTWTSEEGSYSQDMTGVTFFQMIFEVDEKPRTLMTDCLVIKHF  
RKIIMVHPKVRHFHFSVKVNGILSTEIFGVENEPTLNLGNGIALLVDSQHYVRPNFGTIESHCSRIHPVLGHPV  
MFIPIEDVAGMDLLGELILTPAAALCPSPKVSSNQLNRISSVSIFLYGPLGLPLILSTWEQPMTTFFKDTSS  
LVDWK KYHLCMIPNLDLNLDRDLVLPDVSQVESSEEDQSQTMDPQGQTLLFLFVDFHSAFPVQQMEIWGVY  
TLLTTHL NAILVESHVSVVQGSIQFTVDKVLEQHHQAAKAADTQEFRTKLHKVFREITQHQLHHCSEVKQ  
OLTLEKKDSAQ GTEDAPDNSSLELLADTSGQAENKRLKRGSPRIEEMRALRSARAPSPSEAAPRRPEATAA  
PLTPRGREHREAHGR ALAPGRASLGSRLEDVLWLQEVSNLSEWLSPSPGP

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**FIGURE 2317**

CTGACTCTGTCTGGGCATTCTTCCTGGGCTAGAGATGCTCTGCCTCCCAGCAGAAGACAAGAGCCCTAGAAAGAC  
TGTCATTCATTTACTGGAGAGAGAAATGGTTTCATCTACACACACACTCAGAGCCTGGCTAGCTACAAAGCCGTGG  
TCCGTGGTAGGATGTACGTCTTAGTGGAATAAGTAACCTTGAGCAGACAATGGATCCAGCAGTAACAAGCCTGCC  
CTGATGCCGGCGTAAATTCCGAAGGAGCTGGAGAACGATTCTTCCCTTCACTTTATCTAAATCCTCTGAAGGATG  
AGTGGGAGGATGGTTTCTTCTCCCTTCTGGAAGTTGTTTTGTTGGTGCCTTATGCTAAGAGAACCTCAGCAGATA  
CAAATTTATTATTTTCTTTTACAGCAGATTTTCCCTGCAGTTAGAAGAAAACAGCAGCTCACATTGAAAAATATC  
TAATTCCCAAATACGTGATTCCAATAGGGAGTTTATAGAATTTGCTTCTTACCAAAGCAAAATCTTGAATACAT  
GAAATCTAAAATCTTGCCAATTTAATGAATGCCTAATAATTTTTAATAGCATATATCATTTTTAATACATTAAAT  
AGTTGGAAGATTGTTGAGGGATAATTTGTCAATTTTTATTAAAAAGAAAATTCTAAAAATTAATATTCTACA  
TTTATTTTATATTATTATCTTGGCAATTTTATTTTTTATGACAAAATTCTGAGTCTGTTATATTATCCAAATCCT  
AAAAAGATTTAATTGATTACAGAAAAATGTATTGGGAAAAATTGCTTTGCCCTCTTTTTCTCTAAGCAATTCC  
TGAGTTTTAAAAATACTCCTTAAAGGAATAATTTATTTTTTCATGGCCCATCACCAATATCCAAGAGAGTAACCA  
ATTTTTAAATCTGAACCTGTCTTGTGTGACTTTCAAATAAATGAAATGAAGAGGCCCTCAGGCAGTCTGTGTT  
TACACAGGGTGGCAAAATTAACCTTAAGTTACTTGGATCACTGCCTGGGGACACTTCAGAGCCTCTACTCAGGC  
TACTTTTGAGCATACTATGTATGTCGCTGTGCAGAAGCCTACCTCTTCACTCTAGATAAAACAAGACTTTCTGA  
GCACCTACTCTGAGCAAAGCACCGTGCCGCAAGTACAAGGTGGATAAGACTCAGTCCTTGATTGATGGTCTTT  
GTTGGAATAGGTTTTCAAAGTGAATGTCACTGTGTCTCCAGGGGCCAAAAGTTTGCTTTTCATTGATGGGTTTC  
AAAGTAGGGATGAGTTTACTTATAAGTACACATTGTGTCAATTAGTATGCTTGACTCTCCATGGTGCAAAATTTCT  
TTCTAATGCTGATCAATTGCAAACATGATAGAACAATGAAATACTTCCAGGACATTCTAAATCACTCTCCTCCTT  
GTGAGAAAATAGGGTAGAGAGCCTAGCCTGGTACAGGCAGCCATCCATGTCTGATGTGGGTCACTCTGAGAATG  
ACACTCCTCAAAGGGCCAGAGGGTGCTCTTTCTTCAATTTCCCTTACACATGGGTGTTATTCAATACTTATCTACA  
GCCATGTGTCACTTAAACAACCTGGAATATGTTCCAAGAAATCTGTCAATTAGGCTATTTTGTATTGTGTGATCACA  
GAGTGTACTTACACAAACCTAGGGTGGTATAGTTCACTGTACCACCAAGGCCATATAGTGTAGCCTAGGCTACAA  
TATACCTAGGCTATATAGTATAGCCTGTAGCTCCTAGGCTACAAACCTGGACAGCATGTTACTGCACTGAGTACT  
GTAGCAATTGTTACACAGTGGTAACTATTTGTGTATCTAAACATATCTAAACATAGAAAAGATACAGTAAAAATA  
CAGCAGTATAATCTTATGGGACCACCGTTGTATATGTGGTCCATCGTTGATGGAAACATTGTTATGTGGCACATG  
ACTGTATATGCTTTCGTATATAGTGAACATTCAGCAAAGGTTTTATCAATGAATGGATAAATTGGCAACTTTTAT  
GGGCTTAATTGGGCTAAAATATATACGGAGTCACTATTTGACTTAACACCTAGACATTATTTTACTGATATTTT  
CAATAATTCTGTTTTTGTAAAGCCTTCCTTCCATTGGGTGCAATTTCCACTTGGGGAAAAATCTCATTCCCCATC  
CTCTTGTAATTAAAAAGCATGGTTTGTGTTTGTGTAACCTCAAAGTAAATTGAGCAAAAAAAAAAAAAAAAAAAAA  
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA  
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

A



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**FIGURE 2318**

GCGGTTCTCTAGGAAAATTCCTTTGTGCAGATCAGGCCCGTGGATTGGTGAGTGAATCCTAACCACGTCTTCCC  
TGGCCTGTCTTCACTCTTCTCCCCAGAATCACCCTTCTGCCTGGTGTCTGAAGGTGTATTGAGTGATTTTGTG  
GAGGGCAGAAGTAGGAAGTCTTTGGGACAAAACCTGTATTTACCTTGGGATCTGTGAACAAGAGGAACCTCAGCAG  
CCAGGACAGGCAGGAGCAGTGGAAATAGCTACTATGGCTTCTGGAATCCTGGTTAATGTAAAGGAGGAGGTGACCT  
GCCCCATCTGCCTGGAACCTCTGACACAACCCCTGAGCCTGGACTGCGGCCACAGCTTCTGCCAAGCATGCCTCA  
CTGCAAACCACAAGAAGTCCATGTAGACAAAGGAGAGAGTAGCTGCCCTGTGTGCCGGATCAGTTACCAGCCTG  
AGAACATACGGCCTAATCGGCATGTAGCCAACCTAGTGGAGAAGCTCAGGGAGGTCAAGTTGAGCCAGAGGGGGC  
AGAAAGTTGATCATTGTGCAGCCATGGAGAGAACTTCTACTCTTCTGTGAGGAGACGGGAAGGTCAATTTGCT  
GGCTTTGTGAGCGGTCTCAGGAGCACCGTGGTCACCACACGTTCCCCACAGAGGAGGTTGCCAGGAGTACCAAG  
TGAAGCTCCAGGCAGCTCTGGAGATGCTGAGGCAGAAGCAGCAGGAAGCTGAAGAGTTGGAAGCTGACATCAGAG  
AAGAGAAAGCTTCTGGAAGACTCAAATACAGTATGACAAAACCAACGCTTTGGCAGATTTTGAGCAACTGAGAG  
ACATCTGGACTGGGAGGAGAGCAATGAGCTGCAAAACCTGGAGAAGGAGGAGGAAGACATTCTGAAAAGCCTTA  
CGAACTCTGAAACTGAGATGGTGCAGCAGACCCAGTCCCTGAGAGAGCTCATCTCAGATCTGGAGCATCGGCTGC  
AGGGGTCAGTGATGGAGCTGCTTCAGGGTGTGGATGGCGTCATAAAAAGGACGGAGAACGTTGACCTTGAAGAAGC  
CAGAAACTTTTCCAAAAATCAAAGGAGAGTGTTCGAGCTCCTGATCTGAAAGGAATGCTAGAAGTGTTAGAG  
AGCTGACAGATGTCCGACGCTACTGGGTGATGTGACAGTGGCTCCAAACAACATTTTCATGTGCTGTCAATTTCTG  
AAGATAAGAGACAAGTGAAGTCTCCGAAACCACAGATAATATATGGGGCACGAGGGACAAGATACCAGACATTTG  
TGAATTTCAATTATTGTACTGGCATCCTGGGCTCTCAAAGTATCACATCAGGGAAACATTACTGGGAGGTAGACG  
TGTCCAAGAAAACCTGCTTGGATCCTGGGGGTATGTGCTGGCTTCCAACCTGATGCAATGTGTAATATTGAAAAA  
ATGAAAATTATCAACCTAAATACGGCTACTGGGTTATAGGGTTAGAGGAAGGAGTTAAATGTAGTGCTTTCCAGG  
ATAGTTCTTCCATACTCCTTCTGTTCTTTTCATTGTGCCCTCTCTGTGATTATTTGTCTGATCGTGTGGAG  
TTTTCTAGACTATGAGGCTTGCACTGTCTCATTCTTCAATATCACAAACCATGGATTTCTCATCTATAAGTTTT  
CTCACTGTTCTTTTTCTCAGCCTGTATTTCCATATTTAAATCCTAGAAAAATGTGGAGTCCCATGACTCTGTGCT  
CACCAAGCTCTTGAACCTTCTTACACACTCAGCCCTTCTGTACAGCACCTCTTGTCCAGGTGCATCTCATAAC  
CTGAACTCATTTGCATCATTTTAACCATCTTTTCTGTGCTCTCCCTTCTTTCTATTGAAACGTCCTTCACTCA  
TCAGTAAATGTAATAATTGCCTTGTGCCATATTGTCCCAATATTTTATGACATTTGATAGCAATTTTTTCA  
TCATTTTCCGTACTCCTAAGGAAAACCTGACCTATACCTCATAAAATGAGACCGCTATTTAGGTATTACTTCTGCC  
AGATATTTATCACCAATTGCCTCTGACACTGACTAAGAAGATGAAGAAAAGCTTTTCAACAGCCTTTCTATATC  
ATCGTGTGATAATTGTTACCAATGAATGAGTCTTAGCCCTGTGTGAGTTACCCTCGATGCCCTTATTTGTGA  
GTTAAAGAGAAAAATATCATAAATGGTATACCTTAAGTATAGAGGTTTTGTATCTAGAGGATCTCAGTTCAACTC  
CTGTCTCTCCATATACCAGCAGTGTAACGTGAATAACATACTTAAATGGCTGTGCTTATTTCTTTCTTTCT  
TTTTCTTTTTTTTTTTTTTTGAGATGAAGTTTGTCTTGTTCCTCCAGGCTGGAGTGCAATGGCAGCATCTCGG  
TTCCTGCAACCTCCACCTCTCAGATTCAGCAATTCTCCTGCCTCAGCCTCCCAAGTAGCTGGGATTACAGGTG  
CCCACCACCACCCCTGGCTAAATTTGTATTTTCAGTAGAGACGGGGTTTCCCATGTTGGTTAGGCTCGTCTAGA  
GCCTGTGCTTATTTCTTAAAAATAATTTTGTATTAATAAAGTCTACATTAAATAAGTGCTAATGTTTTATTGCAT  
AGTAGGGTGACTAGAGTTAACAATAACCTATTGCATATATTTGAAATAGCTAGAAGAGAGGATTTTGAAAGTTC  
TCAACACAAAGAAACGACACATATTTGAGGTGATGGATATGCTAATTACCCTGGTTCGGTTATTACGCAATGTAT  
ACATGTATCAAAACATCACACTGTACCACATAAATATGTATATTTATTATTGTCAATTAAGCAAAATAAAC  
AAAAAACCTTCATCTAATACTTTGGATCATTGTGAAAAATAAATTCCTGAAGTATAAAGCATCT

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**FIGURE 2319**

MASGILVNVKEEVTCPICLELLTQPLSLDCGHSFCQACLTANHKKSMLEKGESSCPVCRI SYQPENIRPNRHVAN  
LVEKLREVKLSPEGQKVDHCAHGEKLLLFQEDGKVICWLCERSQEHRGHHTFPTEEVAQEYQVKLQA ALEMLR  
QKQQEAELEADIREEKASWKTQIQYDKTNVLADFEQLRDILDWEESNELQNLKEEEDILKSLTNSETEMVQQT  
QSLRELISDLEHRLQGSMELLQGVDGVIKRTENVTLKKPETFPKNQRRVFRAPDLKGMLEVFRELTDVRRYWVD  
VTVAPNNISCAVISEDKRQVSSPKPQIIYGARGTRYQTFVNFNYCTGILGSQSITSGKHYWEVDVSKKTAWILGV  
CAGFQPDAMCNIEKNENYQPKYGYWVIGLEEGVKCSAFQDSSFHTPSVFFIVPLSVIICPDRVGVFLDYEACTVS  
FFNITNHGFLIYKFSHCSFSQPVPFYLNPRKCGVPMTL CSPSS

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**FIGURE 2320A**

ATCTCTATCCTTCTTCTGGTCCTTCCTAGAAAATCAGGTGGAGATGATAGTGGCTTGCATGATGGTGGTAGAGCT  
GGAGGTGCAGGGCAAAGGTCAGATTCTGAATATATTTTGAAAGTAAAGGCAACAAGATTTCTGACAGATTGATT  
ATGGTGTGTCAAAGAAAAGAGAGGAATGCAGGATGATTCAGTGTGTTTTGTTGACAACATAAGTCTGGAGCTGCC  
AACTGGATGCAGAAGTTCAGTGGAGGGCCAGCCTGGGGAAGGATCAGGAGCAGGTTAGGCATGTTAAGCTTGA  
GATGCTGTGTTAAACATCCAGATAGGAATGTCAAAGATGCACTTGTGTTAAGAGTCAGGAATGCAAGAGGGAATT  
TTAGGCTAGAAAACAAAAGTTAGAAATTATTCGATACAGATGGTATTTAAAGCTGTGTGACTGACTGACATGACA  
GAAGTGGCGAGAATAGACTGAGAAGTCCAAGGAATGAGCCTTGGACCACTCCAGTGTAGGTAAGTAGTTGAAAA  
AAAGAGAGAGAGAGAAGGCATCAAAGGAGACTGAGGAAGAGTGATCAGGAAAGCATAGGAAAATCCGAGAAAACAT  
ATGGTGTCTTGAATCTATATGAAAAAGATATATTCAGAAAGACAGAGTGATAAATCTGTCAAATTATTGAATTT  
GTCAGGTAAAATAAGAACAGAGAATTGATCTTTGGACTTAGCAAAGCAGAGATTATCAGTGACTTTTATAAAAAAT  
AGTTTCGGTAGTGTGGAAAGATCAAACCTCTGTTTAGAGTGGGTTTCAGAGAGAACAACAGGAATTGAAGAAGTA  
ATAAATTTGCCAACCACTTAGCTCCAAAGGAAAAGAGGGAAAATATGATGGTAGCTGCCAGGGGAAGTGTGGTC  
AAGAGAGGTTTTTTGTTTTGTTTTCAAGATGGAAGAAAATAACAGTATGTATGTAAGCTCACAGGAGGGATCCAGC  
AGGCATGGGGAATTGATGATATAGGACAGAAAGGGAAGAAATGGCTCCTTGTGAAAGTGAAAGGGGATGGGATCT  
ACAGGATGAACATGCAACAAAGACTGGCTGCAAAGAGAGGCATGAATAGTTCAATTTACAGAAAACAGCAAAGGCA  
GAGTGTGGTACAGATGCTGGTAAGTGGAAAAATATCATGGTAGGAGGTTATGGAGTTCCTATTCTAAACACTTCA  
ACTTCATCAGTGAAATAAGCACGGTAATTTAGCAGAATGTGAAGATGTAAAAGAACAGAAATTTGAGAAAACAGAC  
GATATGAAATAATTATTAGAAAAGCAGAGACTGAAGAACTGTCTATCTCCTTATGTGCTAATGAGTTTAATAATG  
TCCTCCAGTCACCACAAGCCTTCTTTCAAACCTACACAATTTCAAACCTGCTCCGTCTCAGAGTATCTTGAAATAAT  
GATCTGACCGCTGTAGACCACTGAGGGAAGGAATTTGGGTTGATTTAAGAAGAGAACTCTCATGGTCATGGT  
AGACTGATATGGAGAGAAAACATTTTGGGAAAAATACTCAACTAAATTCATTTCTACTCCAGCATGCAGTTTCA  
AGTCAAGTTCACCTTAGCTCCAGGTGGCAGGCAGAGCAGGATGCAGAGGCACAGCACAAAGTAAGGGATCCAATG  
ACTGAGTCAAGAATTACATAACCTGGCCAGACAGCTGGTACATGGGAAAGTGCTAAGAGGGCACCAACAGCGTTC  
CTCCTCCCCAAGGAGCATAATGTGATGGTTCCTGCCGGCCCTGGCTGACTCTCGCCGCTCTGGAGATAATTGGG  
TTCAGTGCCACCTGGACCAGAACTGGGGATGCGGAAGCAACCTGCCAGACACGCGCGAGGTTTCAGGGCTGAGATG

GATCTTGAGGCGGCAAAGAACGGAACAGCCTGGCGCCCCACGAGCGCGGAGGGCGACTTTGAACTGGGCATCAGC  
AGCAAAACAAAAAGGAAAAAACGAAGACAGTGAAAATGATTGGAGTATTAACTGTTTCGATACTCCGATTGG  
CAGGATAAATTGTTATGTCGCTGGGTACCATCATGGCCATAGCTCACGGATCAGGTCTCCCCCTCATGATGATA  
GTATTTGGAGAGATGACTGACAAATTTGTTGATACTGCAGGAACTTCTCCTTTCCAGTGAATTTTCTTGTGCG  
CTGCTAAATCCAGGCAAAATTTGGAAGAAGAAATGACTAGATATGCATATTACTACTCAGGATTGGGTGCTGGA  
GTTCTTGTGCTGCCTATATACAAGTTTCATTTTGGACTTTGGCAGCTGGTGCAGAGATCAGGAAAATTAGGCAG  
AAGTTTTTTCATGCTATTCTACGACAGGAAATAGGATGGTTTGACATCAATGACACCAGTGAATCAATACGCGG  
CTAACAGATGACATCTCCAAATCAGTGAAGGAATTTGGTGACAAGGTTGGAATGTTCTTTCAAGCAGTAGCCAG  
TTTTTTCAGGATTCATAGTGGGATTCATCAGAGGATGGAAGCTACCCCTTGTGATAATGGCCATCAGCCCTATT  
CTAGGACTCTCTGCAGCCGTTTGGGCAAAGATACTCTCGGCATTAGTGACAAAAGAACTAGCTGCTTATGCAAAA  
GCAGGCGCGGTGGCAGAAGAGGCTCTGGGGGCCATCAGGACTGTGATAGCTTTTCGGGGCCAGAACAAAGAGCTG  
GAAAGGTATCAGAAACATTTAGAAAATGCCAAAGAGATTGGAATTAAGAAAGCTATTTAGCAAAACATTTCCATG  
GGTATTGCCTTCTGTAAATATATGCATCATATGCACTGGCCTTCTGGTATGGATCCACTCTAGTCATATCAAAA  
GAATATACTATTGGAATGCAATGACAGTTTTTTTTTCAATCCTAATTTGGAGCTTTTCAGTGTGGCCAGGCTGCC  
CCATGTATTGATGCTTTTGCCAATGCAAGAGGAGCAGCATATGTGATCTTTGATATTATTGATAATAATCCTAAA  
ATTGACAGTTTTTTCAGAGAGAGGACACAAACCAGACAGCATCAAAGGGAATTTGGAGTTCAATGATGTTCACTTT  
TCTTACCCTTCTCGAGCTAACGTCAAGATCTTGAAGGGCCTCAACCTGAAGGTGCAGAGTGGGCAGACGGTGGCC  
CTGGTTGGAAGTAGTGGCTGTGGGAAGAGCACAAACGGTCCAGCTGATACAGAGGCTCTATGACCTGATGAGGGC  
ACAATTAACATTGATGGGCAGGATATTAGGAACCTTTAATGTAACTATCTGAGGGAATCATTGGTGTGGTGAAGT  
CAGGAGCCGGTGCTGTTTTCCACCACAATTGCTGAAAATATTTGTTATGGCCGTGGAAATGTAACCATGGATGAG  
ATAAGAAAGCTGTCAAAGAGGCCAACGCCTATGAGTTTATCATGAAATTACCACAGAAAATTTGACACCCTGGTT  
GGAGAGAGAGGGGCCAGCTGAGTGGTGGGCAGAAGCAGAGGATCGCCATTGCACGTGCCCTGGTTTCGCAACCCC  
AAGATCCTTCTGCTGGATGAGGCCACGTGACGATTGGACACAGAAAGTGAAGCTGAGGTACAGGCAGCTCTGGAT

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**FIGURE 2320B**

AAGGCCAGAGAAGGCCGGACCACCATTGTGATAGCACACCGACTGTCTACGGTCCGAAATGCAGATGTCATCGCT  
GGGTTTGAGGATGGAGTAATTGTGGAGCAAGGAAGCCACAGCGAACTGATGAAGAAGGAAGGGGTGTACTTCAAA  
CTTGTC AACATGCAGACATCAGGAAGCCAGATCCAGTCAGAAGAATTTGAACTAAATGATGAAAAGGCTGCCACT  
AGAATGGCCCCAAATGGCTGGAAATCTCGCCTATTTAGGCATTCTACTCAGAAAAACCTTAAAAATTACAAAATG  
TGTCAGAAGAGCCTTGATGTGGAAACCGATGGACTTGAAGCAAATGTGCCACCAGTGTCTTTCTGAAGGTCTTG  
AAACTGAATAAAACAGAAATGGCCCTACTTTGTGCTGGGAACAGTATGTGCCATTGCCAATGGGGGGCTTCAGCCG  
GCATTTTCAGTCATATTCTCAGAGATCATAGCGATTTTGGACCAGGCGATGATGCAGTGAAGCAGCAGAAAGTGC  
AACATATTCTCTTTGATTTTCTTATTTCTGGGAATTATTTCTTTTTTACTTTCTTCCTCAGGGTTTCACGTTT  
GGGAAAGCTGGCGAGATCCTCACCAGAAGACTGCGGTCAATGGCTTTTAAAGCAATGCTAAGACAGGACATGAGC  
TGGTTTGATGACCATAAAAAACAGTACTGGTGCACTTTCTACAAGACTTGCCACAGATGCTGCCCAAGTCCAAGGA  
GCCACAGGAACCAAGGTTGGCTTTAATTGCACAGAATATAGCTAACCTTGGAAGTGGTATTATCATATCATTATC  
TACGGTTGGCAGTTAACCCTATTGCTATTAGCAGTTGTTCCAATTATTGCTGTGTGTCAGGAATTGTTGAAATGAAA  
TTGTTGGCTGGAAATGCCAAAAGAGATAAAAAAGAACTGGAAGCTGCTGGAAAGATTGCAACAGAGGCAATAGAA  
AATATTAGGACAGTTGTGTCTTTGACCCAGGAAAGAAAATTTGAATCAATGTATGTTGAAAAATTGTATGGACCT  
TACAGGAATTCTGTGCAGAAGGCACACATCTATGGAATTACTTTTAGTATCTCACAAGCATTATGTATTTTTCC  
TATGCCGGTTGTTTTCGATTTGGTGCAATCTCATTGTGAATGGACATATGCGCTTCAGAGATGTTATTCTGGTG  
TTTTCTGCAATTGTATTTGGTGCACTGGCTCTAGGACATGCCAGTTCATTGTCTCCAGACTATGCTAAAGCTAAG  
CTGTCTGCAGCCCACTTATTCATGCTGTTTTGAAAGACAACCTCTGATTGACAGCTACAGTGAAGAGGGGCTGAAG  
CCTGATAAATTTGAAGGAAATATAACATTTAATGAAGTCGTGTTCAACTATCCCACCCGAGCAAACGTGCCAGTG  
CTTCAGGGGCTGAGCCTGGAGGTGAAGAAAGGCCAGACACTAGCCTGGTGGGCAGCAGTGGCTGTGGGAAGAGC  
ACGGTGGTCCAGCTCCTGGAGCGGTTCTACGACCCCTTGGCGGGGACAGTGTGTTGGACTTTGGTTTTAGCTT  
CTCGATGGTCAAGAAGCAAAGAACTCAATGTCCAGTGGCTCAGAGCTCAACTCGGAATCGTGTCTCAGGAGCCT  
ATCCTATTTGACTGCAGCATTGCCGAGAATATTGCCTATGGAGACAACAGCCGGTTGTATCACAGGATGAAATT  
GTGAGTGCAGCCAAAGCTGCCAACATACATCTTTTCATCGAGACGTTACCCACAAATATGAAACAAGAGTGGGA  
GATAAGGGGACTCAGCTCTCAGGAGGTCAAAAACAGAGGATTGCTATTGCCCGAGCCCTCATCAGACAACCTCAA  
ATCCTCCTGTTGGATGAAGCTACATCAGCTCTGGATACTGAAAGTGAAAAGGTTGTCCAAGAAGCCCTGGACAAA  
GCCAGAGAAGGCCGACCTGCATTGTGATTGCTCACCGCTGTCCACCATCCAGAATGCAGACTTAATAGTGGTG  
TTTCAGAATGGGAGAGTCAAGGAGCATGGCAGCATCAGCAGCTGCTGGCACAGAAAGGCATCTATTTTCAATG  
GTCAGTGTCCAGGCTGGGACACAGAACTTATGAACCTTTGCTACAGTATATTTAAAAATAAATTCAAATTATTC  
TACCCATTTT

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**FIGURE 2321**

MDLEAAKNGTAWRPTSAEGDFELGISSKQKRKKTIVKMIGVLTILFRYSDWQDKLFMSLGTIMATAHGSGLPLMM  
IVFGEMTDKFVDTAGNFSFPVNFSLSLNPGKILEEEMTRYAYYYSGLGAGVLVAAYIQVSFWTLAAGRQIRKIR  
QKFFHAILRQEIGWFDINDTTELNTRLTDDISKISEGIGDKVGMFFQAVATFFAGFIVGFIRGWKLTIVIMAISP  
ILGLSAAVWAKILSAFSDKELAAAYAKAGAVAEALGAIRTVIAFGGQNKELERYQKHLENAKEIGIKKAISANIS  
MGIAFLLIYASYALAFWYGSTLVISKEYTIGNAMTVFFSILIGAFSVGQAAPCIDAFANARGAAYVIFDIIDNNP  
KIDFSERGHKPDNIKGNLEFNDVHFSYPSRANVKILKGLNLKVQSGQTVALVGSSGCGKSTTVQLIQRLYDPDE  
GTINIDGQDIRNFNVNYLREIIGVVSQEPVLFSTTIAENICYGRGNVTMDEIKKAVKEANAYEFIMKLPQKFDTL  
VGERGAQLSGGQKQRIAIARALVRNPKILLDEATSALDTESEAEVQAALDKAREGRTTIVIAHRLSTVRNADVI  
AGFEDGVIVEQGSSELMMKEGVYFKLVNMQTSQSIIQSEEFELNDEKAATRMAPNGWKSRLFRHSTQKNLKSQ  
MCQKSLDVETDGLEANVPPVSFLKVLKLNKTEWPYFVVGTVCAIANGGLQPAFSVIFSEIIAIFGPGDDAVKQOK  
CNIFSLIFLFLGIIISFFTFFLQGFTFGKAGEILTRRLRSMFAKMLRQDMSWFDDHKNSTGALSTRLATDAAQVQ  
GATGTRLALIAQNIANLGTGIIISFIYGWQLTLLLLAVVPIIAVSGIVEMKLLAGNAKRDKKELEAAGKIATEAI  
ENIRTVVSLTQERKFESMYVEKLYGPRNSVQKAHIYGITFSISQAFMYFSYAGCFRFGAYLIVNGHMRFRDVIL  
VFSaIVFGAVALGHASSFAPDYAKAKLSAAHLFMLFERQPLIDSYSEEGLKPKDFEGNITFNEVVFNYPTRANVP  
VLQGLSLEVKKGQTLALVGSSGCGKSTVVQLLERFYDPLAGTVFVDFGFQLLDGQEAKKLVQWLRAQLGIVSQE  
PILFDCSIAENIAYGDNRSRVVSQDEIVSAAKAANIHPFIETLPHKYETRVGDKGTQLSGGQKQRIAIARALIRQP  
QILLDEATSALDTESEKVVQEALDKAREGRTICIVIAHRLSTIQNADLIVVFQNGRVKEHGHQQLLAQKGIYFS  
MVSVQAGTQNL

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**FIGURE 2322**

TCTCTCTGTACCTCACCTTCCCTGTGCCACATGGGCCCTCTCTCTCCTGCCAGGACGCTGCGGCTCTGGGGAC  
CTCGGAGCCTGGGGGTGGCTCTGGGAGTCTTCATGACCATTGGCTTTGCACTCCAGCTCTTGGGAGGGCCCTTCC  
AGAGGAGGCTACCTGGGCTACAGCTCCGACAGCCCTCGGCCCCATCCCTACGACCAGCCCTTCCGTCTGCCAC  
CCCCGCAGCGACTGGTGTTCCTGAAGACACATAAATCCGGGAGCAGCTCTGTGCTGAGCCTGCTTCACCGCTATG  
GGGACCAGCACGGGCTGCGCTTCGCCCTCCCTGCCGCTACCAGTTGGCTACCCAAAGCTCTTCCAGGCCTCTA  
GGGTAAAAGGCTACCGCCACAGGCTGGAGGCACCCAGCTCCCTTCCACATCCTCTGTCAACACTTGAGGTTCA  
ACCTGAAAGAGGTACTTCAGGTCATGCCTTCTGACAGCTTCTTTTTTCCATTGTCCGAGACCCAGCGGCTCTGG  
CTCGCTCTGCCTTCTCCTACTATAAATCCACCTCATAGCCTTCCGCAAGTCACCATCTTTGGCTGCCTTCTCTGG  
CCAATCCTCGAGGCTTCTACAGGCTGGGGCCGTTGGGACCCTACGCTCGCAACTTACTATGGTTTGACTTTG  
GCCTGCCCTTTCCCCCAGAGAAGAGGGCCAAGAGAGGAATATTATCCCCCAGAGACCCCAACCCCCACAGC  
TGCAGGTCTTGCCTTCTGGTGTGCTGGCCCTCGAGCCCCAAACCTCAATCCCAATGCCCTCATCCATCTGTTTCCA  
CTGTTACTGATCATCGCAGCCAGATATCAAGCCCTGCCTCTTTTCGATTGGGGTCTTCATCCTTCATCCAGTGGG  
GTCTGGCATGGCTGGACTCTGTCTTTGACCTGGTCATGGTGGCTGAGTACTTCGATGAGTCATTGGTTCTGTCTGG  
CAGATGCCCTGTGCTGGGGTCTAGATGACGTGGTGGGCTTCATGCACAATGCCCAGGCTGGACATAAGCAGGGCC  
TCAGCACTGTGAGCAACAGTGGACTGACTGCGGAGGACCGGCAGCTGACTGCACGGGCCCGAGCCTGGACAAC  
TGGACTGGGCTCTCTATGTCCACTTCAACCGCAGTCTCTGGGCACGGATAGAGAAATACGGCCAGGGCCGGCTGC  
AGACAGCTGTGGCCGAGCTCCGGGCTCGCCGAGAGGCCCTAGCGAAACATTGTCTGGTAGGGGGTGAGGCTTCTG  
ACCCCAAATACATCACTGATCGCCGGTTCCGCCCTTCCAGTTTGGGTCAGCTAAGGTTTGGGCTATATACTTC  
GGAGAGGATTGAGCCCCAAGACCAAGAGGAATGTGAGCGCTAGCTACCCCTGAGCTCCAGTACAAGGACAAGC  
TGGATGCCAAGCAGTTCCCCCTACCGTCTCACTGCCCTCAAGACTTCAAGGCCACTCTCCCCATTAACATCAG  
ACTACAGATTTAGGTGGAAGAGCAGCCATGTTTGAAGGGACATGTGATGAGTGGGGGGCAGCAAGATGCCATTT  
CTGCATCTCCCAGAAGGGATGAGTCTTTGTCCCGATGCAAGCCCCCTCTTCGCTGGGCTCCCAGCAGTGCTTCCC  
TCCTCCACCTCCACTCATTTTGTCTTTTCCCCCACTTTTTTTTTTTTGAACGGAGTCTTGCTCTGTCCCC  
CAGGCTGGAGTGCAGTGGCATGATCTCGGCTCACTGCAACCTCTGCCTCCCAGGTTCAAGCGATTCTCTGCCTC  
AGCCTCCAGAGTAGCTAGGATTACAGATACGTGCCACCATACCCGGCTAATTTTATATTTTAGAGACAGGGAT  
TCAACATGTTGGTTAGGCTGGTCTTGAACCTCCTACCTCAGGTGATCCACATGACTCTGCCTCCCAAAGTGCTGC  
CATTACAGGCGTGAGCCACTAGGCCTGACCTCCCCTTCCCCTTCCCTGCCCCAAGGCAGATCCACATCACCAGG  
CTCCCTAGAGGGGCAAAAGATGGAGTGAGCCACAGGAAGTTTGGGGCGTGGTGAGTTGGAATGATACGTCCATT  
CTCTATGAAATATTTGCTACTAGACTGTTTCTCTCTGACATGTTTGTGAATGAATAAATAATTTGAAACT

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**FIGURE 2323**

MGPLSPARTLRLWGPRSLGVALGVFMTIGFALQLLGPPFQRRLPGLQLRQPSAPSLRPALPSCPPRQRLVFLKTH  
KSGSSSVLSLLHRYGDQHGLRFALPARYQFGYPKLFQASRVKGYRPQGGGTQLPFHILCHHLRFNLKEVLQVMP  
DSFFFSIVRDPAAALARSASFYYKSTSSAFRKSPSLAAFLANPRGFYRPGARGDHYARNLLWFDFGLPFPPEKRAK  
RGNIHPPRDPNPPQLQVLPSGAGPRAQTLNPNALIHVPSTVTDHRSQISSPASFDLGSSSFIQWGLAWLDSVFDL  
VMVAEYFDESLVLLADALCWGLDDVVGFMHNAQAGHKQGLSTVSNGLTAEDRQLTARARAWNLDWALYVHFNR  
SLWARIEKYGQGRQLQTAVAELRARREALAKHCLVGGEASDPKYITDRFRPFQFGSAKVLGYILRRGLSPQDQEE  
CERLATPELQYKDKLDAKQFPPTVSLPLKTSRPLSP

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**FIGURE 2324**

CTAAAGTGGAGCCCAGCGGCGGGTGTGAGAGTCCGTAAGGAGCAGCTTCCAGGATCCTGAGATCCGGAGCAGCCG  
GGGTCGGAGCGGCTCCTCAAGAGTTACTGATCTATGAAATGGCAGAGAATGGAAAAAATTGTGACCAGAGACGTG  
TAGCAATGAACAAGGAACATCATAATGGAAATTCACAGACCCCTCTTCAGTGAATGAAAAGAAGAGGAGGGAGC  
GGGAAGAAAGGCAGAATATTGTCCTGTGGAGACAGCCGCTCATTACCTTGCAATTTTTCTCTGGAAATCCTTG  
TAATCTTGAAGGAATGGACCTCAAATTTATGGCATCGTCAAAGCATTGTGGTGTCTTTTTTACTGCTGCTTGCTG  
TGCTTATAGCTACGTATTATGTTGAAGGAGTGCATCAACAGTATGTGCAACGTATAGAGAAACAGTTTCTTTTGT  
ATGCCTACTGGATAGGCTTAGGAATTTTGTCTTCTGTGTGGGCTTGGAAACAGGGCTGCACACCTTTCTGCTTTATC  
TGGGTCCACATATAGCCTCAGTTACATTAGCTGCTTATGAATGCAATTCAGTTAATTTTCCCGAACCCACCTATC  
CTGATCAGATTATTTGTCCAGATGAAGAGGGGACTGAAGGAACCAATTTCTTTGTGGAGTATCATCTCAAAAGTTA  
GGATTGAAGCCTGCATGTGGGGTATCGGTACAGCAATCGGAGAGCTGCCTCCATATTTTCATGGCCAGAGCAGCTC  
GCCTCTCAGGTGCTGAACCAGATGATGAAGAGTATCAGGAATTTGAAGAGATGCTGGAACATGCAGAGTCTGCAC  
AAGACTTTGCCTCCCGGGCCAACTGGCAGTTCAAAAACCTAGTACAGAAAGTTGGATTTTTTGGAAATTTTGGCCT  
GTGCTTCAATTTCAAATCCTTTATTTGATCTGGCTGGAATAACGTGTGGACACTTTCTGGTACCTTTTGGACCT  
TCTTTGGTGCAACCCTAATTTGAAAAGCAATAATAAAATGCATATCCAGAAAATTTTTGTTATAATAACATTCA  
GCAAGCACATAGTGGAGCAAATGGTGGCTTTTATTGGTGTCTGTCCCGGCATAGGTCCATCTCTGCAGAAGCCAT  
TTCAGGAGTACCTGGAGGCTCAACGGCAGAAGCTTCAACCACAAAAGCGAAATGGGCACACCACAGGGAGAAAAC  
GGTTGTCTGGATGTTTGAAGTTGGTGTCTGTGTCATGGTGTGTTACTTTCATCTATCTATCATTAACTCCATGG  
CACAAAGTTATGCCAAACGAATCCAGCAGCGGTTGAACTCAGAGGAGAAAACCTAAATTAAGTAGAGAAAGTTTAA  
ACTGCAGAAATTGGAGTGGATGGGTTTCTGCCTTAAATTTGGGAGGACTCCAAGCCGGGAAGGAAAATTCCTTTTC  
CAACCTGTATCAATTTTACAACCTTTTTTCTGAAAGCAGTTTAGTCCATACTTTGCACTGACATACTTTTCTCT  
TCTGTGCTAAGGTAAGGTATCCACCCTCGATGCAATCCACCTTGTGTTTTCTTAGGGTGGAAATGTGATGTTTCTCAGC  
AGCAAACCTTGCAACAGACTGGCCTTCTGTTTGTACTTTCAAAAGGCCACATGATACAATTAGAGAATTTCCAC  
CGCACAAAAAAGTTTCTAAGTATGTTAAATATGTCAAGCTTTTATAGGCTTGTACAAATGATTGCTTTGTTTCT  
CTAAGTCATCAAAATGTATATAAATTATCTAGATTGGATAACAGTCTTGCATGTTTATCATGTTACAATTTAATA  
TTCCATCCTGCCCAACCCTTCTCTCCCATCTCAAAAAAGGGCCATTTTATGATGCATTGCACACCCTCTGGGG  
AAATTGATCTTTAAATTTTGAACAGTATAAGGAAAATCTGGTTGGTGTCTTACAAGTGAGCTGACACCATTTT  
TATTCTGTGATTTAGAAATGAAGTCTTGAAAAAACTTTATAAAGACATCTTAAATCATTCCAAAATTGTGTCCG  
TTTTCTTGAGCGTTTTGATTTTTTACTTTTAGCTTATACCAGCTGAATGGCAGCCTTGCCTAATCCACCTACAAC  
AAGAATTTCTTAAGCTTTCTTTTATTTGCATGAGAGAGCCACTACCAAGGCATGTTTGTATGCTGAAACTGGG  
CTGCTGCATACTGCTAAATGGCACCTCTGGGATTGGCCTACCTGGGGATTCTTGGTTTGTGAAAACAGGAGAGG  
AGAAATATCTCATACAAGTGAAGGATACTGGAGAGAGAAATTACCCATTTCTAAAAAAAACCACTCTGTGCG  
TATCTGTGTTAATGTTTTCTAGCATGTACTCTGGTTTCAACAGACACAAATTTATATGTTAATCCAGTTTTCTTG  
CCGTTCTGTAAGTGTTTTTATTTCTAGTGTGATTTTTTCCATTGGGATGTTTTTGATTGAACCTGTTTCTTTGT  
TTGCTTGGGAGGAAAATAACAATTTTACTTTTTCTTAAAAAAAACCACTTTTGT



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**FIGURE 2325**

MAENGKNCQRRVAMNKEHHNGNFTDPSSVNEKKRREREERQNIVLWRQPLITLQYFSLEILVILKEWTSKLWHR  
QSIVVSFLLLLAVLIATYYVEGVHQQYVQRIEKQFLLYAYWIGLGILSSVGLGTGLHTFLLYLGPFIASVTLAAY  
ECNSVNFPEPPYPDQIICPDEEGTEGTISLWSIISKVRIEACMWGIGTAIGELPPYFMAAARLSGAEPDDEEYQ  
EFEEMLEHAESAQDFASRAKLAVQKLVQKVGFFGILACASIPNPLFDLAGITCGHFLVPFWTFFGATLIGKAIK  
MHIQKIFVIITFSKHIVEQMVAFIGAVPGIGPSLQKPFQEYLEAQRQKLHHKSEMGTGPQGENWLSWMFEKLVVVM  
VCYFILSIINSMAQSYAKRIQQRLNSEEKTK

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**FIGURE 2326**

ACTCAGATCGCTTCTTGTTGGTATGTGTAGCGGCAGTGGCCGCCGGCGGAGCAGTCTGAGCCCCACGATGAGGCC  
GGGGACGGGAGCTGAGCGTGGAGGCCTCATGATGGGGCACCCCTGGCATGCATTATGCCCCAATGGGAATGCACCC  
TATGGGTGAGAGAGCGAATATGCCTCCTGTACCTCATGGAATGATGCCGCAGATGATGCCCCCTATGGGAGGGCC  
ACCAATGGGACAAATGCCTGGAATGATGTCGTCAGTAATGCCTGGAATGATGATGTCTCATATGTCTCAGGCTTC  
CATCGAGCCTGCCTTACCGCTAACTAAACGGATATTCCTCTGAAGTGGGATAAATGAAGATGTGGAGTTTCAT  
GTTTCATGTAGGGCAGGTTTTGCCACTATAGTGAGTTTTGGTACCATACTTGAAAAAGTTGGCTTTCAGAGGGTT  
TTGGTTTCCAGAATTGTGGGTAAAGGATTGAGGACCTGTGTACAGTTGGTGACCATATAACATTTAACTACTC  
CCGTAGTCTCGGTTGCTGATCTCTTTTACAATTTATAGCAAGCTCGGGGAAGTGAAGACCACTAAAAGTTTGTCTA  
AGAATATGAGTCAGAGGCTTGAGGATTATGCATAGCAGCCAGGAGTAAATAGTATGGATGTAGCAGCAGGTACAG  
CATCTGGTGCAAAATCAATGTGGACTGAACATAAATCACCTGATGGAAGGACTTACTACTACAACACTGAAACCA  
AACAGTCTACCTGGGAGAAACAGATGATCTTAAACACCTGCTGAGCAACTCTTATCTAAATGCCCTGGAAGG  
AATACAAATCAGATTCTGAAAGCCTTACTATTATAATTCTCAAACAAAAGAATCTCGCTGGGCCAAACCTAAAG  
AACTTGAGGATCTTGAAGGATACCAGAAATACCATTGTTGCTGGAAGTCTTATTACAAAATCAAACCTGCATGCAA  
TGATCAAAGCTGAAGAAAGCAGTAAGCAAGAAGAGTGCACCACAACATCAACAGCCCCAGTCCCTACAACAGAAA  
TTCCGACCACAATGAGCACCATGGCTGCTGCCGAAGCAGCAGCTGCTGTTGTTGCAGCAGCAGCAGCGGCAGCAG  
CAGCAGCAGCTGCAGCCAATGCTAATGCTTCCACTTCTGCTTCTAATACTGTGAGTGGAACTGTTCCAGTTGTTT  
CTGAGCCTGAAGTTACTTCCATTGTTGCTACTGTTGTAGATAATGAGAATACAGTAACATTTCAACTGAGGAAC  
AAGCACAACCTTACTAGTACCCCTGCTATTTCAGGATCAAAGTGTGGAAGTATCCAGTAATACTGGAGAAGAAACAT  
CTAAGCAAGAACTGTAGCTGATTTTACTCCCAAAAAGAGAGGAGGAGCCAAACCAGCAAAGAAAACATACA  
CTTGGAATACAAAGGAAGAGGCAAAGCAAGCTTTTAAAGAATTATTGAAAGAAAAGCGGGTACCATCGAATGCTT  
CATGGGAGCAGGCTATGAAAATGATTATTAATGATCCACGATACAGTGCTTTGGCAAAGTTAAGTAAAAAAGC  
AAGCCTTTAATGCCTATAAAGTCCAGACAGAAAAAAAAAAAAAAAAAAAAA

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**FIGURE 2327**

MDVAAGTASGAKSMWTEHKSPDGRYYYYNTETKQSTWEKPDDLKTPAEQLLSKCPWKEYKSDSGKPYYYNSQTKE  
SRWAKPKELEDLEGYQNTIVAGSLITKSNLHAMIKAEESSKQEECTTTSTAPVPTTEIPTTMSTMAAAEAAAADV  
AAAAAAAAAAAAANANASTSASNTVSGTVPVPEPEVTSIVATVVDNENTVTISTEEQAQLTSTPAIQDQSVEVS  
SNTGEETSKQETVADFTPKEEEESQPAKKTYTWNTKEEAKQAFKELLKEKRVPSNASWEQAMKMIINDPRYSAL  
AKLSEKKQAFNAYKVQTEKKKK

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**FIGURE 2328A**

CGGCGCAGGCGGCGGCGTCCGAGGAGATTTAATCCAGAGACTGACTTCACTATAGAACCCACAGTTGTATCAATG  
GTTGGGGAAAGATAGTGGCAACAGGCAAAGGAGAAACAGCTCTGACATACAAAGAAATGAGTATGCTAAAGCCA  
AGTGGGCTTAAGGCCCCACCAAGATCCTGAAGCCTGGAAGCACAGCTCTGAAGACACCTACGGCTGTTGTAGCT  
CCAGTAGAAAAAACCATATCCAGTGAAAAAGCATCAAGCACTCCATCATCTGAGACTCAGGAGGAATTTGTGGAT  
GACTTTTCAGTTGGGGAGCGAGTTTGGGTGAATGAAATAAGCCTGGATTTATCCAGTTTCTTGGAGAAACCCAG  
TTTGCAACCAGGCCAGTGGGCTGGAATTGTTTTAGATGAACCCATAGGCAAGAACGATGGTTCCGGTGGCAGGAGTT  
CGGTATTTCCAGTGTGAACCTTTAAAGGGCATATTTACCCGACCTTCAAAGTTAACAAGGAAGGTGCAAGCAGAA  
GATGAAGCTAATGGCTGCAGACAACGCCCGCTCCCGAGCTACTTACCCTGTGCACTTCTACGGCCAGCATG  
GTGTCTTCTCCCTCCACCCCTTCAAACATCCCTCAGAAACCATCACAGCCAGCAGCAAGGAACCTTCAGCT  
ACGCCCTCCGATCAGCAACCTTACAAAACTGCCAGTGAATCTATCTCCAACCTTTTCAGAGGCTGGCTCAATCAAG  
AAAGGAGAAAGAGAGCTCAAAATCGGAGACAGAGTATTGGTTGGTGGCACTAAGGCTGGTGTAGTCCGGTTTCTT  
GGGAGACCGACTTTGCCAAGGGGGAGTGGTGTGGCGTGGAGTTAGATGAGCCACTTGGGAAGAATGATGGCGCT  
GTTGCTGGAACAAGGTATTTTCAGTGTCAACCCAAATATGGCTTGTTCGCTCCTGTCCACAAAGTTACCAAGATT  
GGCTTCCCTTCCACTACACCAGCCAAAGCCAAGGCCAACGCAGTGAGGCGAGTGATGGCGACCACGTCCGCCAGC  
CTGAAGCGCAGCCCTTCTGCCTCTTCCCTCAGCTCCATGAGCTCAGTGGCCTCCTCTGTGAGCAGCAGGCCCAGT  
CGGACAGGACTATTGACTGAAACCTCCTCCGTTACGCCAGGAAGATCTCCGGTACCCTGCCCTCCAGGAGGCC  
CTGAAGGAGAAGCAGCAGCACATTGAGCAGCTGCTGGCGGAACGGGATCTGGAGAGGGCGGAGGTGGCCAAGGCC  
ACGAGCCACGTGGGGGAGATAGAGCAGGAGCTAGCTCTGGCCCGGACGGACATGACCAGCATGTCTTGAAATTG  
GAAGCCAAAAATGGACCAGCTGCCAACAATGGTGGAAAGCTGCTGACAGGGAGAAGGTGGAGCTTCTCAACCAGCTT  
GAAGAGGAGAAAAGGAAGGTGAGGACCTTCAGTTCCGGGTTGAAGAAGAATCAATTACCAAGGTGATCTTGAG  
ACGCAGACCAAACCTGGAGCATGCCCGCATTAGGAGCTTGAACAGAGCCTGCTCTTTGAAAAGACCAAAGCTGAC  
AACTCCAGAGGGAGTTAGAAGACACTAGGGTGGCTACAGTTTCAGAAAAGTCACGTATAATGGAAGCTGGAGAAA  
GACCTAGCATTGAGAGTACAGGAAGTAGCTGAGCTCCGAAGAAGGCTAGAGTCCAATAAGCCTGCTGGGGATGTG  
GACATGTCACTTTCCCTTTTGAAGAGATAAGCTCTTTGCAAGAAAAGTTAGAAGTCACCCGTAAGTACCACAG  
AGAGAAAATACTTCTCTGAAGGAGCATTTTGGAGCCCGGAAGAACTCATCAGAAGGAGATAAAGGCTCTGTAT  
ACCGCCACGGAAAAGCTTTCCAAAGAGAACGAGTCATTGAAAAGCAAGCTGGAGCATGCCAACAAAGAGAACTCA  
GATGTGATAGCTCTATGGAAGTCCAAACTGGAGACTGCCATCGCATCCCACCAGCAGGCGATGGAAGAAGTGAAG  
GTATCTTTTCAGCAAAGGGCTTGGAAACAGAGACGGCAGAATTTGCTGAACTAAAAACACAAATAGAGAAAAATGAGA  
CTAGATTACCAACACGAAATAGAAAATTTGCAGAATCAACAAGACTCTGAACGGGCTGCCCATGTCTAAAGAGATG  
GAAGCCTTGAGGGCTAAACTGATGAAAGTTATTAAAGAAAAGGAAAACAGTCTGGAAGCCATCAGGTGCAAACTG  
GACAAAGCAGAAGACCAGCATCTCGTAGAAATGGAAGACACGTTAAACAAATTACAGGAAGCTGAAATAAAGGTA  
AAGGAGCTAGAGGTACTGCAAGCCAAATGCAATGAACAAACCAAGGTATTGATAATTTTACATCACAGCTCAAG  
GCTACTGAAGAAAAGCTCTTGATCTTGATGCACTTCGGAAGCCAGTTCGGAAGGTAAATCGGAAATGAAGAAA  
CTTAGACAGCAGCTTGAGGCAGCTGAGAAACAGATTAAACATTTAGAGATTGAAAAGAATGCTGAAAGTAGCAAG  
GCTAGTAGCATTACCAGAGAGCTCCAGGGGAGAGAGCTAAAGCTTACTAACCTTCAGGAAAATTTGAGTGAAGTC  
AGTCAAGTGAAAGAGACTTTGGAAGAAAGAACTTCAGATTTTGAAGAAAAGTTTGTGTAAGCTTCAGAGGAGGCA  
GTCTCTGTTTCAGAGAAGTATGCAAGAACTGTAAATAAGTTACACCAAAGGAGGAACAGTTTAACATGCTGTCT  
TCTGACTTGGAGAAGCTGAGAGAAAACCTTAGCAGATATGGAGGCCAAATTTAGAGAGAAAGATGAGAGAGAAGAG  
CAGCTGATAAAGGCAAAGGAAAAACTTGAAAATGACATTGCAGAAATAATGAAGATGTCAGGAGATAACTCTTCT  
CAGCTGACAAAAATGAACGATGAATTACGTCTGAAAGAAAGAGATGTAGAAGAATTACAGCTAAAACCTTACAAAG  
GCTAATGAAAATGCAAGTTTTCTGCAAAAAGTATTGAGGACATGACTGTCAAAGCTGAACAGAGCCAGCAAGAA  
GCAGCTAAAAAGCATGAGGAAGAAAAGAAAGAAATTGGAGAGGAAATTTGCGACCTGGAAAAGAAAATGGAACA  
AGCCACAACCAAGTGTGAGGAGCTGAAAGCCAGGTATGAGAGAGCCACTTCTGAGACAAAAACCAAGCATGAAGAA  
ATCCTACAGAACCTCCAGAAGACGCTGCTGGACACAGAGGACAAGCTGAAGGGCGCACGGGAGGAGAACAGTGGC  
TTGCTGCAAGGAGCTGGAGGAGCTGAGAAAGCAAGCCGACAAAGCTGCTCAAACAGCGGAAGATGCCATG  
CAGATAATGGAACAGATGACCAAGAGAAGACTGAGACTCTGGCCTCCTTGGAGGACACCAAGCAACAAATGCA  
AAACTACAGAATGAATTGGACACACTTAAAGAAAACAACCTTGAAAAATGTGAAGAGCTGAACAAATCAAAAGAA  
CTCCTGACTGTAGAGAATCAAAAAATGGAAGAATTTAGGAAAGAAATAGAAACCCTAAAGCAGGCAGCAGCTCAG

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**FIGURE 2328B**

AAGTCCCAGCAGCTTTTCAGCGTTGCAAGAAGAGAACGTTAACTTGCTGAGGAGCTGGGGAGAAGCAGGGACGAA  
GTCACAAGTCATCAAAAGCTGGAAGAAGAAAGATCTGTGCTCAATAATCAGTTGTTAGAAATGAAAAAAGAGAA  
TCCAAGTTCATAAAAGACGCAGATGAAGAGAAAGCTTCCTTGCAAGAAATCCATCAGTATAACTAGTGCCTTACTC  
ACAGAAAAGGATGCCGAGCTGGAGAACTGAGAAATGAGGTCACAGTGCTCAGGGGAGAAAACGCCCTCTGCCAAG  
TCCTTGCAATTCAGTTGTTTCAGACTCTAGAGTCTGATAAGGTGAAGCTCGAGCTCAAGGTAAAGAACTTGGAGCTT  
CAACTCAAAGAAAACAAGAGGCAGCTCAGCAGCTCCTCAGGTAATACAGACACTCAGGCAGACGAGGATGAAAGA  
GCCCAGGAGAGTCAGATTGATTTCCTAAATTAGTAATAGTGGACCTTCAAAGGAAGAATCAAGACCTCAAGATG  
AAGGTGGAGATGATGTCAGAAGCAGCCCTGAATGGGAACGGGGATGACCTAAACAATTATGACAGTGATGATCAG  
GAGAAACAGTCCAAGAAGAAACCTCGCCTCTTCTGTGACATTTGTGACTGCTTTGATCTCCACGACACAGAGGAT  
TGTCCTACCCAGGCACAGATGTCAGAGGACCCTCCCCATTCCACACACCATGGCAGTCGGGGTGAGGAACGCCCA  
TACTGTGAAATCTGTGAGATGTTTGGACACTGGGCCACCAACTGCAATGACGACGAAACCTTCTGATGAAGCCTC  
CAGTGGAGAATCGGCTTGCTCAGACGCACTCGCATTGACACAACGTAACACCAGCATTGTGTGTGACACTTCA  
GGAGAATCATGTTATTTTTTAAACCCGTCAACAAATCTAGGAAAATATTTTGATCTTCAACAAATTGCCCTTTA  
GTCTCCCGTATGAGTTAGAATAATAATATTTAGTAGGTGAGTTTTACCTCGAATTTTGTTCCTTGATTTTT  
ACGTTTGAAGACATTGCACCAGATGCCATTACATTTATTGGCCCCCGACCTTGTAGAAAAACCCCTACCCTCAC  
AATACCTTATTTAAGTAACCTTTAAATTATGCCGTTACTTTTTCATATTTGCACCTAAGATATTTCCAGGCTGCATT  
TGTATATTTAGATTTTTTGGTTAAGCTTTGACACTGGAATGAGTTGAAAAATGTGCCATTTTGCATTTTCATCT  
ACTCATTTAAAGTATTTTATTCTTATTCAAAGAAATATCTGAGCTCTTGCACCTACCTGTTATCAGTAGTGCCTT  
TACTTCAGGCTTGATAATACTTAGGTGTGATTATAAATCATGAAGCAGGTAAAGGGAGGGGCAAGCCCCAACT  
GCTGTGGGGACATTTTATAATCTATATGCTGCACCCACTTAATCTACTGTGGTGTTTTGTATTAGTTTTGCAT  
AATTTAGCTTCTATATATTGTATGTATATATTTTTTAAAAATCTATATTTTGGGAAAAAACATACACAATGTG  
TCTTTCTTTTGGACATTTACCTTTTTTAAAAAGAAACACTTAAATGATCATTAGGACATAACAGACTAGGCC  
AGACATAGCATCTTGTGGCTTTGCAACCATTTTCATTTGTTTGTTCCTTTTATTTCTTACCAGATTTAAATA  
AAAGGAGGAATTTTCTCCAATTTTTTTTCTCTGCGCAGGTATCCCCAGCAGTCAATTAACAATAAGCCAGT  
ATAAAACACCTAAATAACCAATCTACAATCTCCCTTCACAAGTTTTTTTACTGTTTTTAGATGAATGTACGATGA  
GAAATTCAACGTTAATAATTCTGGATTTTCTTATCACAAGAAAGAAATGAAGGACCTCAAAGCACCTGAACAGT  
TTATCGACCAGTTTGAATCTATTTATCTTCATTTGAATGTCTCTAGATATGTAAAAAGTCATAAAATGTATCTT  
CCATGCTACATGTACAATAAGAACTTCTATAATTGTATATATGCCTTTGATGTATTTCCCTCAAGATTATCAA  
CTGTGTGTTGACAGTGAATATCAATCTGGTACCAGTTGAAATTTTTGGTTATAAATGTAATACGAATTGTTTC  
ACAAACAGAAAACATGTAAAGCAGTATTAATTTGGCCAAACAAGTGTCTGTATCTACTTTAATAAATGGTT  
ATTCTTT

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**FIGURE 2329**

MSMLKPSGLKAPT KILKPGSTALKTPTAVVAPVEKTISSEKASSTPSSETQEEFVDDFRVGERVWVNGNKP GFIQ  
FLGETQFAPGQWAGIVLDEPIGKNDGSGVAGVRYFQCEPLKGIFTRPSKLTRKVQAEDEANGLQTTTPASRATSPIC  
TSTASMVSSSPSTPSNIPQKPSQPAAKEPSATPPI SNLTKTASESISNLSEAGSIKKGERELKIGDRVLVGGTKA  
GVVRFLGETDFAKGEWCGVELDEPLGKNDGAVAGTRYFQCQPKYGLFAPVHKVTKIGFPSTTPAKAKANAVRRVM  
ATTSASLKRSPTSASSLSMSSVASSVSSRPSRTGLLTETSSRYARKISGTTALQEALKEKQQHIEQLLAERDLER  
AEVAKATSHVGEIEQELALARDGHDQHVLLEAKMDQLRTMVEAADREKVLLNQLEEEKRVEDLQFRVEEESI  
TKGDLETQTKLEHARIKELEQSLFEKTKADKLQRELEDTRVATVSEKSRIMELEKDLALRVQEVAE LRRRLESN  
KPAGDVMSLSLLQEISSLQEKLEVTRTDHQREITSLEKHFAGAREETHQKEIKALYTATEKLSKENESLSKSKLEH  
ANKENSDVIALWKS KLETAIASHQQAMEELKVFSKGLGTETAFAELKTQIEKMRDLYQHEIENLQNQQDSERA  
AHAKEMEALRAKLMKVIKEKENSLEAIRSKLDKAEDQHLVEMEDTLNKLQAEIKVKELEVLQAKCNEQTKVIDN  
FTSQLKATEEKLLDLDALRKASSEKSEMKKLRQQLEAAEKQIKHLEIEKNAESSKASSITRELQGRELKLTLNLO  
ENLSEVSQVKETLEKELQILKEKFAEASEEAVSVQRSMQETVNLKHQKEEQFNMLSSDLEKLREN LADMEAKFRE  
KDEREEQLIKAKEKLENDIAEIMKMSGDNSSQLTKMNDLRLKERDVEELQLKLTKANENASFLQKSIEDMTVKA  
EQSQQEAAKKHEEEKELERKLS DLEKKMETSHNQCQELKARYERATSETTKKHEEILQNLQKTLTLDTE DKLKGA  
REENSGLLQELEELRKQADKAKAAQTAEDAMQIMEQMTKEKTETTLASLEDTKQTNAKLQNELDTLKENNLKNVEE  
LNKSKELLTVENQKMEEFRKEIETLKQAAAQKSQQLSALQEENVKLAEEELGRSRDEVTS HQKLEEERSVLNNQLL  
EMKKRESKF IKDADEEKASLQKSISITSALLTEKDAELEKLRNEVTVL RGENASAKSLHSVQTLES DKVKLELK  
VKNLELQ LKENKRQLSSSSGNTDTQADEDERAQESQIDFLNSVIVDLQRKNQDLKMKVEMMSEALNGNGDDLNN  
YDSDDEKQSKKKPRLFCDCFDLHDTEDCPTQAQMSEDPPHSTHHGSRGEERP YCEICEMFGHWATNCNDDE  
TF

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**FIGURE 2330A**

GGTCTCACCATGGAGCGGAAAGTGCTTGGCTCCAGGCCCGAAAGAAAAGGACCAAGGCCAAGAAGGACAAAGCC  
CAAAGGAAATCTGAAACTCAGCACCGAGGCTCTGCTCCCCACTCTGAGAGTGATCTACCAGAGCAGGAAGAGGAG  
ATTCTGGGATCTGATGATGATGAGCAAGAAGATCCTAATGATTATTGTAAAGGAGGTTATCATCTTTGTGAAAATT  
GGAGATCTATTCAATGGGAGATACCATGTGATCCGAAAGTTAGGCTGGGGACACTTTTCAACAGTATGGTTATCA  
TGGGATATTGAGGGAAGAAATTTGTGGCAATGAAAGTAGTTAAAAGTGCTGAACATTACACTGAAACAGCACTA  
GATGAAATCCGGTTGCTGAAGTCAGTTTCGCAATTCAGACCCTAATGATCCAAATAGAGAAATGGTTGTTCAACTA  
CTAGATGACTTTAAAATATCAGGAGTTAATGGAACACATATCTGCATGGTATTGAAGTTTTGGGGCATCATCTG  
CTCAAGTGGATCATCAAATCCAATTATCAGGGGCTTCCACTGCCTTGTGTCAAAAAAATTATTACGCAAGTGTTA  
CAGGGTCTTGATTATTTACATACCAAGTGCCGTATCATCCACACTGACATTAAACCAGAGAACATCTTATTGTCA  
GTGAATGAGCAGTACATTCCGAGGCTGGCTGCAGAAGCAACAGAATGGCAGCGATCTGGAGCTCCTCCGCCTTCC  
GGATCTGCAGTCAGTACTGCTCCCCAGCCTAAACCAGCTGACAAAATGTCAAAGAATAAGAAGAAGAAATTGAAG  
AAGAAGCAGAAGCGCCAGGCAGAATTACTAGAGAAGCGAATGCAGGAAATTGAGGAAATGGAGAAGAGTCGGGC  
CCTGGGCAAAAAAGACCAACAAGCAAGAAGAATCAGAGAGTCCTGTTGAAAGACCCCTTGAAGAGAACCCACCT  
AATAAAATGACCCAAGAAAACTTGAAGAGTCAAGTACCATTGGCCAGGATCAAACGCTTATGGAACGTGATACA  
GAGGGTGGTGCAGCAGAAATTAATTGCAATGGAGTGATTGAAGTCATTAATTATACTCAGAACAGTAATAATGAA  
ACATTGAGACATAAAGAGGATCTACATAATGCTAATGACTGTGATGTCCAAAATTGAATCAGGAATCTAGTTTC  
CTAAGTCCCCAAATGGAGACAGCAGCACATCTCAGAAACAGACTCTTGTACACCTATAACATCTGAGGTGTCA  
GACACCATGGTGTGCCAGTCTTCCTCAACTGTAGTTCAGTCATTTCAGTGAACAACACATTAGCCAACTTCAAGAA  
AGCATTCCGGGCAGAGATACCCTGTGAAGATGAACAAGAGCAAGAACAATAACGGACCACTGGACAACAAAGGAAAA  
TCCACGGCTGGAATTTTCTTGTTAATCCCCCTTGAGCCAAAAATGCAGAAAAGCTCAAGGTGAAGATTGCTGAC  
CTTGGAATGCTTGTGGCACAACATTTCACTGAAGATATTCAAACAAGGCAATATCGTTCCTTGGAAGTTCTA  
ATCGGATCTGGCTATAATACCCCTGCTGACATTTGGAGCACGGCATGCATGGCCTTTGAACTGGCCACAGGTGAC  
TATTTGTTTGAACCTCATTTCAGGGGAAGAGTACACTCGAGATGAAGATCACATTGCATTGATCATAGAATTCTG  
GGGAAGGTGCCTCGCAAGCTCATTGTGGCAGGAAAATATTCCAAGGAATTTTTCACCAAAAAGGTGACCTGAAA  
CATATCACGAAGCTGAAACCTTGGGGCCTTTTGGAGTTCTAGTGGAAGATGAGTGGTTCGCAGGAAGAGGCCA  
GCTGGCTTCACAGATTTCTTACTGCCATGTTGGAGCTGATCCCTGAGAAGAGAGCCACTGCCGCCGAGTGTCTC  
CGGCACCTTGGCTTAACCTCCTAAGCCCCCTGCCAGCACCACAGCAGAGATCACACACTGACCTCCGCCCTTCC  
CCTTCAAGCATTTTCTCTTCCCTTTTTCAGGGTGAAGCTCTTCTTCAAGAGTTTCTAGATCTTGTTTTTTTTTT  
AATCCAACATGTTTCAATTTGGGTTTGCTTACTTGACCTGTGGAGATCCCCACAGCCATTGGGCATCCTAGGTGAA  
TTTGGCCTTGGTTGGGCTCTGCCAAAGACTAATGGACTAAAATGTGAAACAGCCTCTTGCCCTGTACCTTTCCTT  
CCCATTAGGACATCCTTTAAATTATAAGCATCCTTTTGAAGAGCTATGAAGGTGTATGAGCCCATCCTTTTA  
TTCATTGACTCTAAGAGTCAAATTTTCTAGTGATATCCTATTGCCAGCATAAGGATGAGGAGGGGGAAGGGTC  
TTAATTCTATGTACAGCAGAGACATTAACTTGCTGTGTCCGGGCTGCATCATCTTCTGGACTGTTTCTGTGT  
TCTCTGTGTTACATTTTTTCTGCAACTTTTAAGCTACTGTCTTTTTTAATAGCTATATGAACACCAAATTTG  
GGTACCATTTTATCACTGTTCAAAGCACTGTCAAATTCCTTTCATCCTTTAATAGTTAAGATCTTTGAATCTTCA  
GTCTGATTTTTAATGTAAGCAAAAACAGAACCATTTGAATAGTAATTTCTTGAGAACCTCAGGTGTTCTATAAACA  
GTCTTTTCTGTATGTCTTATTACCCCTAAGACCAGAGTTATTTTGGTTGGTTGTTTTGTTTTATTTTTTGT  
TTGTATCCATGGCTGGCACTTTACTCATTGCATTGAGTTTATTGCCCATAACTAAAGGATCAGGATGATGGTA  
GAACGGAGATCTGGGTTTCAGAGCTTTCCCATTTAAGAAAAATAGATCTTGAGATTCTGATTCTTTTCCAAACAG  
TCCCTGCTTTCATGTACAGCTTTTCTTTACCTTACCCAAAATCTGGCCTTGAAGCAGTTTTCTCTATGGCT  
TTGCCCTTCTGATTTTCTCAGAGGCTCGAGTCTTTAATATAACCCCAAATGAAAGAACCAAGGGGAGGGGTGGGA  
TGGCACTTTTTTTGTTGGTCTGTTTTGTTTTGTTTTGTTTTGTTTTGTTTTTAAAGATTAGCCAT  
TCTCTGCTGCTATTTCCCTACATAATGTCAATTTTAAACCATAATTTTGACATGATTGAGATGTAATTGAGGCTT  
TTTTGTTTTAATTGAGAAAAGACTTTGCAATTTTTTTTTTAGGATGAGCCTCTCCTAGACTTGACCTAGAATATT  
ACATATTCCTCCAGTAAGTAATACTGAAGAGCAAAAAGAGAGGAGGATTGGGGTCACAGCCGCTTCTTCAGCATG  
GACCAAGTGGGCCTTGGGGATTGCAGCGTTCTCGAAGTGGCTGTAGGACTCGAATTTACAGAAAGCCACAGAGGT  
GCAACTTGAGGCTCTGCTAGCAAGCCACAGTGGGCTATTGGGTAACCACCTTTCTATACAGGAGATTGGAATC  
TACTTTGTCAATTATCCACCACAGTGACAAAGGAAAAGTGGTGCCGTTATGCAATCCATTTAACTCATAAACATA

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**FIGURE 2330B**

TTACTCTGAGTAACTGGCCAGCCATTTCATCGGATCCTTCATTGGGTACTCCTGAAATCAGACATGTTCTGTAGA  
AAGAATTTTAAGTTAGGCTTTCTATGCACCTATCAAGAATCAAGAGAATAGATTGTATCAAACAACGGCAGGGAA  
ATCCTTCAGCAATTCTAATCCACTTTGGGTTTTTCAGCTGTTTTTACATCTAAAGCAATAGACTAGAACTGAATTA  
TCTTCTACATAGTAAATCACAATTGTGGAATTACAGGAATTCTGGTGATATTAAGGTGAAATAACAAAACACAA  
AAGGCCCTATTTTAACAGTTGATGTGACAGTAAGTTTTAATAGAACCTGTAACTTCATTTTGGAAATGCTTCTCC  
ACCAAATAAGGGCTTTTCCCCTATTTAAGGAGCCAGATGGATTGAAAGATGTGGAAATAGGCAGCTGTAGATCT  
TGATCTTCAGGTACCCCATGTACCTTTATTGAGCTTAATTATAATACTGTCAAATTGCCACGATCTCACTAAAG  
GATTTCTATTTGCTGTCAGTTAAAAATAAGCCCTAAATACATTTTATTCTTTCTACTGAGGGCATTGTCTGTT  
TTCTTTGTAAATGCCGTACAATAACAAATTATTTAATAACCTA



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**FIGURE 2331**

MERKVLALQARKKRTKAKKDKAQRKSETQHRGSAPHSESDLPEQEEIILGSDDDEQEDPNDYCKGGYHLVKIGDL  
FNTRYHVIRKLGWGHFSTVWLSWDIQGKKFVAMKVKS AEHYTETALDEIRLLKSVRNSDPNDPNREMVVQLLDD  
FKISGVNGTHICMVFEVLGHHLLKWIIKS NYQGLPLPCVKKIIQQVLQGLDYLHTKCRIIHTDIKPENILLSVNE  
QYIRRLAAEATEWQRSGAPPPSGSAVSTAPQPKPADKMSKNKKKKLKKKQKRQAELLEKRMQEIEEMEKESSGPGQ  
KRPNKQEESESPVERPLKENPPNKMTQEKLEESSTIGQDQTLMERDTEGGAAEINCNGVIEVINYTQNSNNETLR  
HKEDLHNANDCDVQNLNQESSFLSSQNGDSSTSQETDSCPTITSEVSDTMVCQSSSTVGQSFSEQHISQLQESIR  
AEIPCEDEQE QEHNGLDNKGKSTAGNFLVNPLEPKNAEKLKVKIADLGNACWHKHFTEDIQTRQYRSLEVLIGS  
GYNTPADIWSTACMAFELATGDYLFEPHSGEETRDEDHIALIIELLGKVERKLIVAGKYSKEFFTCKGDLKHIT  
KLKPWGLFEVLVEKEYEWSQEEAAGFTDFLLPMLLELIPEKRATAAECLRHPWLNS

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**FIGURE 2332**

TTTCTCTTTCTCTAAGAGTCTCTCTCTCCCTTTCCCTCTCTCTCCCCCAATCTGTCTTTCTAGCATGTTGCC  
TTTTTCAACCACATTTGTGTTTCAGGTGTAGAGAGGAGAGAGAGTGAACAGGGAGCGGGGCTTTTGTCTGTTGGT  
CTCCCTGGACTGAAGAGAGGGAGAATAGAAGCCCAAGACTAAGATTCTCAAAATGGTTTTATTACCCAGAACTCTT  
TGTCTGGGTCAAGTCAAGAACCATTTCCAAACAAGGACATGGAGGGAAGGCTTCCTAAGGGAAGACTTCCTGTCCC  
AAAGGAAGTGAACCGCAAGAAGAACGATGAGACAAACGCTGCCTCCCTGACTCCACTGGGCAGCAGTGAACCTCCG  
CTCCCCAAGAATCAGTTACCTCCACTTTTTTAAATCGTAACACCTCCATTTGTATTACATATGGTGTATGGGTAT  
TGATGAGGTTCATGGTATCATATATGGGATTTTTTCTGTGTAAATCATCAAGTATAAGAAGAACTATGGGACTC  
TGAGCCTTGCTTTAGAGAATTTACAGTGGACAAAAGGTGTCTCAAAACCAGTTTTTAATCATTCTGACTCAAGT  
GAAAACGCTCAGAAATTCACACTGTGAATCCACGTTTACAACCCTTACAGGTGGGCCCTTCAGGCCTGGTTCGCTA  
CAACAATGTCTTCCACAACCTCAAACCTCCACCGCGCTCACACAACCGGTCCACTCCTGCCTTTTCACTCACACAG  
CTCCCGACTGCTTCTGCAGAGGCTGAGAGTCCCCCCCCCACCCTTTTTTTTTTCAATTAGATGTAACAAACCTAG  
TAGTTTATGTTTCATCAATTGTCTGTATATCTCTATATTTTATCCATGTACTCTTTTGATGTATAGAAGTAGTTTG  
AACTCATTGTTTCCCTGTGGTAAGTGACCGAGATGCTGCCACAGGACCTGAGACACTGATGAATGGTGTCTATT  
TGGACTTTCAACATGCTCCTTGCGGAGGTAGCTCTGATGGAGTTATTTTTTATTTCCATGTTCTAAGAAGGTGTT  
GGTACTCTGTTTCCCTGAATGTTGTTCTCTAGACTGGATTGACTTGTTTTCTTGTTGCTTCAGTGTGGCTTTCT  
TCCTCAGTGTTGTAGGTTGAGCGAATGCTACCAGAGTGTGAGAGACCATTGTCTCGTTGGCTGGCGCTCACGGAC  
ATGCAGTCACGGTAGCGGGAGCAATCAGAAAAGTGAATTTACTTACCAAATCTCTTCCCTTTCCGTAGCCTCGCC  
TGCCTGACTTAGAGAAAAGAAAAGCAATAATTTTACAGGCATTTTGAGGTGTCTTTTGGGTCTTTCTGTTTGAA  
AGGATATTTGTCGAAAAAAGAGCAAAACCGTTTTTAAATAAACTCCCCCTGGAAAAAACCCAAAACACTGGCAT  
CTGAGTAGGAATATGAAAATGACACCTTTTCCAAATATTAAATTGGAAAAACAAGGTCTACAAAATCATGATACTT  
TTTTAAAGGCAGAGCATTCTTTTTTTCGGCAATTTTGATAAGCAAGGTGTAGATTTACATTTTGTCTTGTCTC  
CAACGAAATGGATAAACAAAAATAAATTACCATCTACTCATGGAATGTTGTTGTGTTAGCCAGTCTGAAAGCCCA  
CCTTAATTTTTATATAACTGTCTTTAGCTCTTCTTTTGACAGGGCAGGCCTTGTTCTGAACTGTTTCGCTTCTGA  
CTGTTAAACACCGATGACGCATGCACTGCACTTCTTCGTTTTCTTCTGCTCCCCATTGGCCTGAGTTTCTGT  
GCATTACTCCTCTCCCTCCTTCGTTAGAATAGGTATATCAGCTGTGTAATAGAGCAAGAAAACAGTATTCTGCA  
TCTGTGGCATTATGTAGAGTTGCAGTTGTGTACTGCTGAAAATGCAGGCTTTTGTAACAGTGTGATCTTTACTG  
ATGCACTCATGACAAGTACCCAATGTATTTTAGCTATTTTAGTAGTATTTGTTCAATAAATACGCAAGCTGTAAG  
GTAAGTGTCTG

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**FIGURE 2333**

MVYYPELFVWVSQEPFPNKDMEGRLPKGRLPVPKEVNRKKNDETNAASLTPLGSSELRSPRISYLFHF

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**FIGURE 2334**

AAATTCTTATTCTTAGTGAGAGACTGTAGTTAAAAGGAAGGCTTTTAGAACTTGGGTTCAAGGAAGATGGAGATG  
CGTCGGAAGCTCTTTGGCGGGGTGAGGAAGTTCAGAAAGTGTGCATTTTCCTTCTGGCATTAGGTCTTGTCCG  
TGTGATTTGGTGGTGCTTGGGTCATAAGCCTGATTAAAATTCAGGGACATGTACCACGGCGGCCAAAGCGGAATT  
AATTTTTTTATATGGGGACTGGAGCGCTGAAAAGTTGTTCTTGACCAGGCTCTAATGAGAAATTCCTCTCTCCCC  
AGGTTATGAAGACAGTATCGAGTTTCCAGACCATAGTAGACATTGCTACAGTGTCTGAGCGAGCAGAGACACCA  
GGGTTTTCTTTGTGACTGCACTGTTCTGGTGGGAGATGCCCAGTCCGAGCGCACCGAGCTGTACTGGCTTCATG  
CAGCATGTATTTCCACCTCTTTTACAAGGACCAGCTGGACAAAAGAGACATTGTTTCATCTGAACAGCGACATTGT  
TACAGCCCCCGCTTTTCGCTCTCTGCTTGAATTCATGTATGAAGGGAACTCCAGTTCAAAGACTTGCCCCATTGA  
AGACGTGCTAGCAGCTGCCAGTTATCTCCACATGTATGACATTGTCAAAGTCTGCAAAAAGAAGCTGAAAGAGAA  
AGCCACCACGGAGGCAGACAGCACCAAAAAGGAAGAAGATGCTTCAAGTTGTTTCGGACAAAAGTCGAGAGTCTCTC  
CGATGGCAGCAGCCACATAGCAGGCGATTGCCCCAGTGATGAAGATGAAGGAGAAGATGAAAAATTGAACATCCT  
GCCCAGCAAAAGGGACTTGGCGGGCGAGCCTGGGAACATGTGGATGCGATTGCCCTCAGACTCAGCAGGCATCCC  
CCAGGCTGGCGGAGAGGCAGAGCCACACGCCACAGCAGCTGGAAAAACAGTAGCCAGCCCCGTCAGCTCAACAGA  
GTCTTTGTCCAGAGGTCTGTACCTCCGTGAGGGATTGGGCAGATGTTGACTGTGTGCTGGACCTGTCTGTCAA  
GTCCAGCCTTTTCAAGGAGTTGAAAATCTGAACAGCTCTTATTTCTCTTACAGGACGTGCTGAGAAGCAACCTGGT  
GCAGGTGAAGGTGGAGAAAGAGGCTTCCTGTGATGAGAGTGATGTTGGCACTAATGACTATGACATGGAACATAG  
CACTGTGAAAGAAAGTGTGAGCACTAATAACAGGGTACAGTATGAGCCGGCCCATCTGGCTCCCCTGAGGGAGGA  
CTCGGTCTTGAGGGAGCTGGACCGGGAGGACAAAGCCAGTGATGATGAGATGATGACCCAGAGAGCGAGCGTGT  
CCAGGTGGAGGGAGGCATGGAGAGCAGTCTGCTCCCCTACGTCTCCAACATCCTGAGCCCCGCGGGCCAGATCTT  
CATGTGCCCCCTGTGCAACAAGGTCTTCCCCAGCCCCACATCCTGCAGATCCACCTGAGCACGCACTTCCGCGA  
GCAGGACGGCATCCGCAGCAAGCCCCGCCGCGATGTCAACGTGCCCACGTGCTCGCTGTGTGGGAAGACTTTCTC  
TTGCATGTACACCCTCAAGCGCCACGAGAGGACTCACTCGGGGGAGAAGCCCTACACATGCACCCAGTGCGGCAA  
GAGCTTCCAGTACTCGCACAACTGAGCCGCCATGCCGTGGTGACACCCGCGAGAAGCCGACGCCTGCAAGTG  
GTGCGAGCGCAGGTTTACGCAGTCCGGGGACCTGTACAGACACATTGCAAGTTCCACTGTGAGTTGGTGAACCTC  
CTTGTCGTTCAAAAGCGAAGCACTGAGCTTGCCCTACTGTGACAGACTGGACCTTAGAAGATAGCTCTCAAGAAGT  
TTGGAAATAAATTTTATATATATATAAATAATATATATATATACATATATATAAATAGATCTCTATATAGTTGT  
GGTACGGTCTAAAAGCAGTCTTGTTCCTGGAAATAAAAAGTTGGGATATTAAGTTGTTTTTGCACTTTAGAAT

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**FIGURE 2335**

MEFPDHSRHLQCLSEQRHQGFLCDCTVLVGDAQFRAHRAVLASCSMYFHLFYKDQLDKRDIVHLNSDIVTAPAF  
ALLLEFMYEGKLQFKDLP IEDVLAAASYLHMYDIVKVCKKKLKEKATTEADSTKKEEDASSCSDKVESLSDGSSH  
IAGDLPSEDEGEDEKLNILPSKRD LAAPGNMWMRLP SDSAGIPQAGGEAEPHATAAGKTVASPCSSTESLSQR  
SVTSVRDSADVDCVLDLSVKSSLSGVENLNSSYFSSQDVLRSNLVQVKEKEASCDESDVGTNDYDMEHSTVKES  
VSTNNRVQYEPAHLAPLREDSVLRELDREDKASDDEMMTPESERVQVEGGMESSLLPYVSNILSPAGQIFMCPLC  
NKVFPSPHILQIHLSTHFREQDGIRSKPAADVNVPTCSLCGKTFSCMYTLKRHERTHSGEKPYTCTQCGKSFOYS  
HNLSRHAVVHTREKPHACKWCERRFTQSGDLYRHIRKFHCELVNSLSVKSEALS LPTVRDWTLEDSSQELWK

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**FIGURE 2336A**

AGCGCCCGCCGCTCCGGGGCCGGCTGGTGCGGAGACGCCGCCGAGAGTTGTGAAGGGCGCGGGTGGGGGGCGC  
TGCCGGCCTCGTGGGTACGTTCTGTGCCGCTCTGTCCCAGAGCTGGGGCCGAGGAGCGGAGGCAAGAGGGGCAC  
**TATGGCAGACAAAGTTAGGAGGCAGAGGCCGAGGAGGCGAGTCTGTTGGGCCCTTGGTGGCTGTGCTCTTGGCAGA**  
CCTGTTGGCACTGAGTGATACACTGGCAGTGATGTCTGTGGACCTGGGCAGTGAGTCCATGAAGGTGGCCATTGT  
CAAACCTGGAGTGCCCATGGAAATTGTCTGAATAAGGAATCTCGGAGGAAAACACCGGTGATCGTGACCTGAA  
AGAAAATGAAAGATTCTTTGGAGACAGTGCAGCAAGCATGGCGATTAGAATCCAAAGGCTACGCTACGTTACTT  
CCAGCACCTCCTGGGAAGCAGGCAGATAACCCCCATGTAGCTCTTTACCAGGCCCGCTTCCCGGAGCAGAGCT  
GACTTTGACCCACAGAGGCAGACTGTGCACCTTCAGATCAGCTCGCAGCTGCAGTTCTCACCTGAGGAAGTGT  
GGGCATGGTTCTCAATTATTCTCGTTCTCTAGCTGAAGATTTGCAGAGCAGCCCATCAAGGATGCAGTGATCAC  
CGTGCCAGTCTTCTTCAACCAGGCCGAGCGCCGAGCTGTGCTGCAGGCTGCTCGTATGGCTGGCCTCAAAGTGCT  
GCAGCTCATCAATGACAACACCGCCACTGCCCTCAGCTATGGTGTCTTCCGCCGAAAGATATTAACACCACTGC  
CCAGAATATCATGTTCTATGACATGGGCTCAGGCAGCACCTGTATGCACCATGTGACCTACCAGATGGTGAAGAC  
TAAGGAAGCTGGGATGCAGCCACAGCTGCAGATCCGGGGAGTAGGATTTGACCGTACCCTGGGGGGCCTGGAGAT  
GGAGCTCCGGCTTCGAGAACGCCTGGCTGGGCTTTTCAATGAGCAGCGCAAGGGTCAGAGAGCAAAGGATGTGCG  
GGAGAACCCGCTGCCATGGCCAAGCTGCTGCGTGAGGCTAATCGGCTCAAACCGTCTCAGTGCCAACGCTGA  
CCACATGGCACAGATTGAAGGCTGATGGATGATGTGGACTTCAAGGCAAAGTGACTCGTGTGGAATTTGAGGA  
GTTGTGTGCAGACTTGTGAGCGGGTGCCCTGGGCTGTACAGCAGGCCCTCCAGAGTGCCGAAATGAGTCTGGA  
TGAGATTGAGCAGGTGATCCTGGTGGGTGGGGCCACTCGGGTCCCCAGAGTTCAGGAGGTGCTGCTGAAGGCCGT  
GGGCAAGGAGGAGCTGGGGAAGAACATCAATGCAGATGAAGCAGCCGCCATGGGGGCAGTGTACCAGGCAGCTGC  
GCTCAGCAAAGCCTTTAAAGTGAAGCCATTTGTCGTCCGAGATGCAGTGGTCTACCCCATCTCGGTGGAGTTTAC  
GAGGGAGGTGGAGGAGGAGCCTGGGATTACAGCCTGAAGCACAATAAACGGGTACTCTTCTCTCGGATGGGGCC  
CTACCCTCAACGCAAAGTCATCACCTTTAACCCTACAGCCATGATTTCAACTTCCACATCAACTACGGCGACCT  
GGGCTTCTGGGGCCTGAAGATCTTCGGGTATTTGGCTCCCAGAACTTGACCACAGTGAAGCTAAAAGGGGTGGG  
TGACAGCTTCAAGAAGTATCCTGACTACGAGTCCAAGGGCATCAAGGCTCACTTCAACCTGGATGAGAGTGGCGT  
GCTCAGTCTAGACAGGGTGGAGTCTGTATTTGAGACACTGGTAGAGGACAGCGCAGAAGAGGAATCTACTCTCAC  
CAAACCTGGCAACACCATTTCCAGCCTGTTTGGAGGCGGTACCACACCAGATGCCAAGGAGAATGGTACTGATAC  
TGTCAGGAGGAAGAGGAGAGCCCTGCAGAGGGGAGCAAGGACGAGCCTGGGGAGCAGGTGGAGCTCAAGGAGGA  
AGCTGAGGCCCCAGTGGAGGATGGCTCTCAGCCCCACCCCTGAACCTAAGGGAGATGCAACCCCTGAGGGAGA  
AAAGGCCACAGAAAAAGAAATGGGGACAAGTCTGAGGCCAGAAACCAAGTGAGAAGGCAGAGGCAGGGCCTGA  
GGGCGTCTGCTCCAGCCCCAGAGGGAGAGAAGAAGCAGAAGCCCGCCAGGAAGCGGCGAATGGTAGAGGAGATCGG  
GGTGGAGCTGGTTGTTCTGGACCTGCCTGACTTGCCAGAGGATAAGCTGGCTCAGTCGGTGCAGAACTTCAGGA  
CTTGACACTCCGAGACCTGGAGAAGCAGGAACGGGAAAAAGCTGCCAACAGCTTGGAAGCGTTTATATTTGAGAC  
CCAGGACAAGCTGTACCAGCCCAGTACCAGGAAGTGTCCACAGAGGAGCAGCGTGAGGAGATCTCTGGGAAGCT  
CAGCGCCGCATCCACCTGGCTGGAGGATGAGGGTGTGGAGCCACCACAGTGATGTTGAAGGAGAAGCTGGCTGA  
GCTGAGGAAGCTGTGCCAAGGGCTGTTTTTCGGGTAGAGGAGCGCAAGAAGTGGCCCGAACGGCTGTCTGCCCT  
CGATAATCTCCTCAACCATTCAGCATGTTCTCAAGGGGGCCCGGCTCATCCAGAGATGGACCAGATCTTCAC  
TGAGGTGGAGATGACAACGTTAGAGAAAGTCATCAATGAGACCTGGGCTGGAAGAATGCAACTCTGGCCGAGCA  
GGCTAAGCTGCCCGCCACAGAGAAGCCTGTGTTGCTCTCAAAAGACATTGAAGCTAAGATGATGGCCCTGGACCG  
AGAGGTGCAGTATCTGCTCAATAAGGCCAAGTTTACCAAGCCCCGGCCCCGGCTAAGGACAAGAATGGGACCCG  
GGCAGAGCCACCCCTCAATGCCAGTGCCAGTGACCAGGGGGAGAAGGTCATCCCTCCAGCAGGCCAGACTGAAGA  
TGCAGAGCCCATTTAGAACCTGAGAAAGTAGAGACTGGATCCGAGCCAGGAGACACTGAGCCTTTGGAGTTAGG  
AGGTCCTGGAGCAGAACCTGAACAGAAAGAACATCGACAGGACAGAAGCGGCCTTTGAAGAACGACGAAC**TATA**  
**ACCCCCACCTCTGTTTTCCCATTCATCTCCACCCCTTCCCCACCACTTCTATTTATTTAACATCGAGGGTTG**  
GGGGAGGGGTGGTCTGCCCTCGGCTGGAGTTCCTTTCTACCCCTGTGATTTGGAGGTGTGGAGAAGGGGAAG  
GGAGGGACAGCTCACTGGTTCCTTCTGCAGTACCTCTGTGGTTAAAAATGGAACTGTCTCCTCCCGACCCCA  
CTCCTGTTCCCTACCATATAGGCCCTAAATTTGGGAAAAATCACTATTAATTTCTGAATCCTTTGCCCTGTGGG  
TAGGAAGAGAATGGCTGCCAGTGGCTGATGGGTCCCGTGATGGGAAGGGTATCAGGTTGCTGGGGAGTTTCCAC  
TCTTCTCTGGTGATTGTTCTTCCCTCCCTTCTCTCCACCATGCGATGAGCATCCTTTCAGGCCAGTGCTCTGC

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**FIGURE 2336B**

AGAGCCTCAGTTACCAGGTTTGGTTTCTGAGTGCCTATCTGTGCTCTTTCCCTCCCTCTGCGGGCTTCTCTTGCTC  
TGAGCCTCCCTTCCCCATTCCCATGCAGCTCCTTTCCCCCTGGGTTTCCTTGGCTTCCTGCAGCAAATTGGGCAG  
TTCTCTGCCCCCTGCCTAAAAGCCTGTACCTCTGGATTGGCGGAAGTAAATCTGGAAGGATTCTCACTCGTATTT  
CCCACCCCTAGTGGCCAGAGGAGGGAGGGGCACAGTGAAGAAGGGAGCCCACCACCTCTCCGAAGAGGAAAGCCA  
CGTAGAGTGGTTGGCATGGGGTGCCAGCATCGTGCAAGCTCTGTCTATAATCTGCATCTTCCCAGCAGCCTGGTAC  
CCCAGGTTCCCTGTAACTCCCTGCCTCCTCCTCTCTCTGTCTGTTCTGCTCCTCCCAGACAGAGCCTTTCCCTCAC  
CCCCTGACCCCTGGGCTGACCAAAATGTGCTTTCTACTGTGAGTCCCTATCCCAAGATCCTGGGGAAAGGAGAG  
ACCATGGTGTGAATGTAGAGATGCCACCTCCCTCTCTCTGAGGCAGGCCTGTGGATGAAGGAGGAGGGTCAGGGC  
TGGCCTTCCTCTGTGCATCACTCTGCTAGGTTGGGGGCCCCGACCCACCATACTACGCCTAGGGAGCCCGTCC  
TCCAGTATTCGTCIGTAGCAGGAGCTAGGGCTGCTGCCTCAGCTCCAAGACAAGAATGAACCTGGCTGTGTGAG  
TCATTTTGCTTTTCCCTTTTTTTTTTTTTTGGCCACATTGGCAGAGATGGGACCTAAGGGTCCCACCCCTCACCCCA  
CCCCACCTCTTCTGTATGTTTGAATTCTTTCAGTAGCTGTTGATGCTGGTTGGACAGGTTTGAGTCAAATTGTA  
CTTTGCTCCATTGTTAATTGAGAACTGTTTCAATAAAATATTCTTTTCTAC

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**FIGURE 2337**

MADKVRQRPRRRVCWALVAVLLADLLALSDTLAVMSVDLGSESMKVAIVKPGVPMIIVLNKESRRKTPVIVTLK  
ENERFFGDSAASMAIKNPKATLRYFQHLLGKQADNPHVALYQARFPEHELTFDPQRQTVHFQISSQLQFSPEEVL  
GMVLNYSRSLAEDFAEQPIKDAVITVPVFFNQAERRAVLQAARMAGLKVLQLINDNTATALSYGVFRRKDINTTA  
QNIMFYDMGSGSTVCTIVTYQMVKTKEAGMQPQLQIRGVGFDRITLGGLEMELELRLRERLAGLFNEQRKGQRAKDVR  
ENPRAMAKLLREANRLKTVLSANADHMAQIEGLMDDVDFKAKVTRVEFEELCADLFEFVPGPVQQAALQSAEMSLD  
EIEQVILVGGATRVPRVQEVLLKAVGKEELGKNINADEAAAMGAVYQAAALSKAFKVKPFVVRDAVVYPILVEFT  
REVEEPEGIHSKHNKRVLFSRMGYPYQKRVITFNRYSHDFNFHINYGDLGFLGPEDLRVFGSQNLTTVKLKGVG  
DSFKKYPDYESKGIKAHFNLDSEGLSLDRVESVFETLVEDSAEEESTLTCLKGNTISSLFGGGTTTPDAKENGTD  
VQEEESPAGESKDEPGEQVELKEEAEAPVEDGSQPPPEPKGDATPEGEKATEKENGDKSEAQKPSEKAEAGPE  
GVAPAPEGEKKQKPARRRMVEEIGVELVVLDPDLPEDKLAQSVQKLQDLTLRLDLEKQEREKAANSLEAFIFET  
QDKLYQPEYQEVSTEEQREEISGKLSAASTWLEDEGVGATTVMLKEKLAELRKLCQGLFFRVEERKKWPERLSAL  
DNLLNHSSMFLKGARLIPMDQIFTEVEMTTLEKVINETWAWKNATLAEQAKLPATEKPVLLSKDIEAKMMALDR  
EVQYLLNKAKFTKPRPRPKDKNGTRAEPPLNASASDQGEKVI PPAGQTEDAEP ISEPEKVETGSEPGDTEPLELG  
GPGAEPEQKEQSTGQKRPLKNDEL



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**FIGURE 2338**

CCAAATTATTGTATCTCACAGTGTGGGGAAAAGGAAGAGAGATCAGATTGTTACTGTGTCTGTGTAGAAAGAAGT  
AGACATAGGAGACTCCATTTTGTATGTACTAAGAAAAATTCTCTGCCTTGAGATTCTGTTAATCTATAACCTT  
ACCCCCAACCCCGTGTCTCTGAAACATGTGCTGTGCTCTCAGAATTGCCTGTTTTTTGTGCTCCTCCGAGC  
TCGCTGTTCTGTCGGGTTTTTTACGTTTTAATTTCCAGGACTTGAAGTCCATGTCTCTGAAGAAGGAAAGCTC  
TTCTGTTGGAGGGCTCAACTTTAACACCGACGAGCAGGCACTGGAAGACCACTTCAGCAGTTTCGGACCTATCTCT  
GAGGTGGTCGTTGTCAAGGACCGGAGACTCAGCGGTCCAGGGTTTTGGTTTTCACTACCTTCACCAACCCAGAG  
CATGCTTCAGTTGCCATGAGAGCCATGAACGGAGAGTCTCTGGATGGTCGTGATCCGTGTGGATCATGCAGGC  
AAGTCTGCTCGGGGAACAGAGGAGGTGGCTTTGGGGCCCATGGGCGTGGTCGCAGCTACTCTAGAGGTGGTGGG  
GACCAGGGCTATGGGAGTGGCAGGTATTATGACAGTCGACCTGGAGGGTATGGATATGGATATGGACGTTCCAGA  
GACTATAATGGCAGAAACCAGGGTGGTTATGACCGCTACTCAGGAGGAAATTACAGAGACAATTATGACAACTGA

AATGAGACATGCACATAATATAGATACACAAGGAATAATTTCTGATCCAGGATCGTCCTTCCAAATGGCTGTATT  
TATAAAGGTTTTTGGAGCTGCACTGAAGCATCTTATTTTATAGTATATCAACCTTTTGTTTTTAAATTGACCTGC  
CAAGGTAGCTGAAGACCTTTTAGACAGTCCCATCTTTTTTTTTAAATTTTTCTGCCTATTTAAAGACAAATTA  
TGGGACGTTTGTAGAACCTGAGTATTTTCTTTTTACCAGTTTTTTAGTTTGAGCTCTTAGGTTTATTGGAGCTA  
GCAATAATTGGTTCTGGCAAGTTTGGCCAGACTGACTTCAAAAAATTAATGTGTATCCAGGGACATTTTAAACC  
TGTACACAGTGTATTATTGTGGTTAGGAAGCAATTTCCCAATGTACCTATAAGAAATGTGCATCAAGCCAGCCTGA  
CCAACATGGTGAAACCCCATCTGTACTAAACATAAAAAAATTAGCCTGGCATGGTGGTGTACGCCTGTAAATCCCA  
GTGACTTGGGAGGCTGAGGCAGGAGAATCGCTTGAACCCGGGAGGCGGAGGTTGCAGTGAGCTAAGATCGCGCCA  
CTGTACTCCAGCCTGGACAACAGCGAGAGCTCCATCTCAAAAAAAGGAAATGTGTATCAAGAACATGATTAT  
CCAGCGGTATTTCTAATTCAGATCATCAACTGATTATATAGAAGAGTTGGCTTTAAATGTTTGCAAATGTGCG  
ATGTTGAGAAATGGTATTTCTTCAGTTTTATTTTAGGATTTCTATAGTTTGATGATC

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**FIGURE 2339**

MSSEEGKLFVGGGLNFNTDEQALEDHFSSFGPISEVVVVKDRETQSRGFGFITFTNPEHASVAMRAMNGESLDGR  
QIRVDHAGKSARGTRGGGFGAHGRGRSYSRGGGDQGYGSGRYYDSRPGGYGYGYGRSRDYNGRNQGGYDRYSGGN  
YRDNYDN

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**FIGURE 2340**

AAAAGCAAGCCAGGAGGTGCTTGC GGCCGCTTCTAGTAGTTTCCAGGCGCTGCCGGGCGGCTGGCACTAAGCGGT  
CCTGAGGCTGTGGCTACGGCTGCTCCGGAGCTGGTGGCGCCGCGATAGGAGAGCCGATGGCCAAGTGGGGTGAGG  
GAGACCCACGCTGGATCGTGGAGGAGCGGGCGGACGCCACCAACGTCAACAAC TGGCACTGGACGGAGAGAGATG  
CTTCAAATTGGTCCACGGATAAGCTGAAAACACTGTTCTTGGCAGTGCAGGTTCAAATGAAGAAGGCAAGTGTG  
AGGTGACGGAAGTGAGTAAGCTTGATGGAGAGGCATCCATTAACAATCGCAAAGGGAACTTATCTCTTTTATG  
AATGGAGCGTCAAAC TAACTGGACAGGTACTTCTAAGTCAGGAGTACAGTACAAAGGACATGTGGAGATCCCCA  
ATTTGTCTGATGAAAACAGCGTGGATGAAGTGGAGATTAGTGTGAGCCTTGCCAAAGATGAGCCTGACACAAATC  
TCGTGGCCTTAATGAAGGAAGAAGGGGTGAAACTTCTAAGAGAAGCAATGGGAATTACATCAGCACCCCTCAAAA  
CAGAGTTCACCCAGGGCATGATCTTACCTACAATGAATGGAGAGTCAGTAGACCCAGTGGGGCAGCCAGCACTGA  
AACTGAGGAGCGCAAGGCTAAGCCTGCTCCTTCAAAAACCCAGGCCAGACCTGTTGGAGTCAAAATCCCCACTT  
GTAAGATCACTCTTAAGGAAACCTTCTGACGTCACCAGAGGAGCTCTATAGAGTGTTTACCACCCAAGAGCTGG  
TGCAGGCCTTTACCCATGCTCCTGCAACATTAGAAGCAGACAGAGGTGGAAGTTCCACATGGTAGATGGCAACG  
TCTCTGGGGAATTTACTGATCTGGTCCCTGAGAAACATATTGTGATGAAGTGGAGGTTTAAATCTTGGCCAGAGG  
GACACTTTGCCACCATCACCTTGACCTTCATCGACAAGAACGGAGAGACTGAGCTGTGCATGGAAGGTCGAGGCA  
TCCCTGCTCCTGAGGAAGAGCGGACACGACAGGGCTGGCAGCGGTACTACTTTGAGGGCATTAAACAGACCTTTG  
GCTATGGCGCACGCTTATTTAGGGCCAGCGGCAGGGGACTCCAGCCTGCTGGACACTTCAGTCCAGCTCTCTCC  
TGACTGGGGCTTGCGACTCACAGGATTGCATCGTCCCAGCTGCTAACTTGGGGCCGGGGCCCCCTCCCTTCCACAT  
ATACCTTGGGTTTGTGCATGTTTTCTGCTGGGTGGGTTCAGAGGGCAATTTCTCTTTTATGTGTACATATGCTAA  
ATAACATAATTTAAAAAACAAAA

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**FIGURE 2341**

MAKWGEGDPRWIVEERADATNVNWWHWTERDASNWSTDKLKTLFLAVQVQNEEGKCEVTEVSKLDGEASINNRKG  
KLIFFYEWVSVKLNWTGTSKSGVQYKGHVEIPNLSDENSVDEVEISVSLAKDEPDNLVALMKKEGVKLLREAMGI  
YISTLKTEFTQGMILPTMNGESVDPVGPALKTEERKAKPAPSKTQARPVGVKIPTCKITLKETFILTSPEELYRV  
FTTQELVQAFTHAPATLEADRGGKFHMDGNVSGETFDLVPEKHIVMKWRFKSWPEGHFATITLTFIDKNGETEL  
CMEGRGIPAPEEERTRQGWQRYFEGIKQTFGYGARLF

GGGGCCTGGTGTGATTCCGTCCTGCGCGGTGTTTCTCTGGAGCAGCGTTCTTTTATCTCCGTCGCCCTTCTCTCC  
TACCTAAGTGCCTGCCGCCACCCGATGGAAGATTTCGATGGACATGGACATGAGCCCCCTGAGGCCCCAGAACTAT  
CTTTTCGGTTGTGAACATAAAGGCCGACAAAGATTATCACTTTAAGGTGGATAATGATGAAAATGAGCACCAGTTA  
TCTTTAAGAACGGTCAGTTTAGGGGCTGGTGCAAAGGATGAGTTGCACATTGTTGAAGCAGAGGCAATGAATTAC  
GAAGGCAGTCCAATTAAAGTAACACTGGCAACTTTGAAAATGTCTGTACAGCCAACGGTTTCCCTTGGGGGCTTT  
GAAATAACACCACCAGTGGTCTTAAGGTTGAAGTGTGGTTCAGGGCCAGTGCATATTAGTGGACAGCACTTAGTA  
GCTGTGGAGGAAGATGCAGAGTCAGAAGATGAAGAGGAGGAGGATGTGAAACTCTTAAGTATATCTGAAAAGCGG  
TCTGCCCCTGAGGTGGTAGCAAGGTTCACAGAAAAAAGTAAAACTTGCTGCTGATGAAGATGATGACGATGAT  
GATGAAGAGGATGATGATGAAGATGATGATGATGATGATTTTGATGATGAGGAAGCTGAAGAAAAAGCGCCAGTG  
AAGAAATCTATACGAGATACTCCAGCCAAAAATGCACAAAAGTCAAATCAGAATGAAAAAGACTCAAAACCATCA  
TCAACACCAAGATCAAAAGGACAGAATCCTTCAAGAAACAGGAAAAAACTCCTAAACACCAAAAGGACCTAGT  
TCTGTAGAAGACATTAAGCAAAAATGCAAGCAAGTATAGAAAAAGGTGGTTCTCTTCCCAAAGTGAAGCCAAA  
TCTCTCAATTATGTGAAGAATTGCTTCCGGATGACTGACCAAGAGGCTATTCAAGATCTCTGGCAGTGGAGGAAG  
TCTCTTTAAGAAAAATAGTTTAAACAATTTGTTAAAAAATTTCCGTCCTATTTCATTTCTGTAACAGTTGATATC  
TGGCTGTCCTTTTTATAATGCAGAGTGAGAACTTCCCTACCGTGTTTGATAAATGTTGTCCAGGTTCTATTGCC  
AAGAATGTGTTGTCCAAAATGCCTGTTTAGTTTTTAAAGATGGAACCCACCCTTTGCTTGGTTTTAAGTATGTA  
TGGAATGTTATGATAGGACATAGTAGTAGCGGTGGTCAGACATGGAATGGTGGGGAGACAAAAATACACATGTG  
AAATAAAACTCAGTATTTTAATAAAGTAAAAAAAAAAAAAAAAACCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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**FIGURE 2343**

MEDSMDMDMSPLRPQNYLFGCELKADKDYHFKVDNDENEHQLSLRTVSLGAGAKDELHIVEAEAMNYEGSPIKVT  
LATLKMSVQPTVSLGGFEITPPVVLRLKCGSGPVHISGQHLVAVEEDAEESEDEEEEDVKLLSISGKRSAPGGGSK  
VPQKKVKLADEDDDDDEEDDDDDDDDFDDEEAEEKAPVKKSIRDTPAKNAQKSNQNGKDSKPSSTPRSKGQ  
ESFKKQEKTPKTPKGPSSVEDIKAKMQASIEKGGSLPKVEAKFINYVKNCFRMTDQEAIQDLWQWRKSL

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**FIGURE 2344**

CCGCCCTGGAGGCCGGAGCCACTGGGCCTGCGCGCCTCGGCAGCGAGCAGCCGCTTTGCTCGCGTGCAGGAGGCT  
GTTTCGCTACCTCACACCCCCGGCTGGCGCTGTGGCCTCGCTTAGCTCTACCGTTTAGCACCCGGCGACATGCACC  
CGGTTCGTTTCCGCCAGGATGCGGGAGAGTTGGGGCAAGCTACCTGCGACAGCTTGAACTTTCTAGGGATTCC  
GCTCCACCCGCCGGTTAGAGCGTATTGCTCATTAAATCCGAGACCTGTGTGCTTGCTACTGAAATAAAAGAAGTA  
TTTTTTGCCCCAGAGTCCTTTTAGGACGTTATGACTTTTCTCCTTTGCAAGACTGCAAAAACTGACAAGAAGAC  
AAAACTCTTCCCACTCCAGGGACCGGCTTGTCTTGAGTTTGGCTAGTAAAGGCTAGCAAGTGAGGCTTTGTCTC  
TGCATCCCCTTCCCCCTAACATCCTCAGAGAACCTTCGTTTCTAGAATCTTTCTAGTATTAGAGACTTCTCCAG  
GGTCATGATCCCAAAGGCTTAACCCGTTTACAAGGAGAGAGTTGTCTCCTGACGCCCCAAATGGCAGCTAAATG  
GAGATACTTTAAGCTCCAACACTGAAGCTTCTCCAAGCAAGAGAGACATAATAGCCAACTAGAAGAGAAA  
CGGGGCCCTCCTCTGCAAAAACTGCCCAGATCCTGAGCTCTGCCGCCAGAGCTTCAGACGCTTTGTATCAAA  
GAGGTGTCTGGACCCCAAGAGGCGCTCTCCAGCTCCGACAGCTCTGCCGTGAGTTGCAACCCGAGCTGCAC  
ACCAAGGAGCAGATTTTGGAGCTTCTGGTGATGGAGCAGTTCTGACCATCTGCCCCCGAGATCCAGGCTCGG  
GTCAGGCATCGATGTCCAATGAGCAGCAAGGAGATTGTGACCCTCGTGGAAGATTTTCACAGAGCATCCAAGAAA  
CCAAAGCAGTGGGTGGCCGTTTGTATGCAGGGGCAAAAGGTGCTCTTGGAGAAAAGTGGATCTCAGCTTGGAGAA  
CAGGAACTGCCAGACTTTCAACCGCAGACTCCTAGGAGAGATCTCAGGGAGAGCTCTCCAGCAGAGCCTTCCCAG  
GCAGGAGCTTATGACCGGCTGAGCCCCATCATTGGGAGAAATCCCCACTCCTCCAAGAACCAACCCCAAAATTG  
GCTGGGACAGAGGCCCCCAGAATGAGAAGTGACAACAAGGAAAATCCACAACAGGAAGGGGCTAAAGGAGCAAAG  
CCATGTGCAGTGTGAGCTGGCAGATCCAAAGGGAATGGTCTGCAGAATCCTGAACCAAGAGGGGCAAAATATGAGT  
GAACCTCGGTTGTACGGAGGCAGGTGAGCTCCCCAAATGCTCAAAAGCCATTTGCTCACTACCAGAGACATTGC  
AGGGTGAATACATCAGCAGCCCCCTAAAAAGCCACCCACTGAGAGAGCTAAAGAAAAGCAAAGGAGGTAAACGG  
AGTCTGAGCAACCGTTTGAACATCTTGGTCACCAGCCCACCCGCTCAGCAAAGAAACCTACAAATGTGATGAC  
TGTGGGAAAAGCTTCACGTGGAATTCAGAGCTGAAGAGACACAAGAGAGTCCACACAGGAGAGAGACCCTACACG  
TGCGGAGAGTGTGGAACTGCTTTGGGCGGCAGTCAACCCCTGAAGCTGCACCAGAGGATCCACACTGGAGAGAAG  
CCATACCAGTGTGGCCAGTGTGGGAAAAGCTTTCCGCCAGAGCTCAAACCTTACCAGCATACCGACTTACCAT  
GGGGACTAAAAGGAGCACTCCATGCTTTAGATTACACGGAAGGTGTTGTGTTTCTCCTCCCCCTTGCTTGCAT  
GTAAATCACAAAAGCTGTGTGACTTACAAGGAAAGCACGAGGCCCTTGAGGAATGATGATGCACATTCTGCTGTG  
AGGAGGCCCAGAAAAGGCCAACAGGGCCCAACCGTGCATGATGACAGGGTGCAGAGAAGGCAGGTCTGGGCACT  
GGGGCAAAGAGAACTTAAGTCTCTGCAGAGAGCAAGGAGTAACTACTGAGAGAGAATCAGGACAATCCTGCAGGT  
GGCCCGCTTACTGTTAAATCGTCCCTCTGTTGCTTTATCCTCTAAAATATGTTAAGGGATAAATCTATATATAT  
AGTTATGCATTTGCTGTGCATACCAGACAATTTTTTATCATGAGCACACTTCTTTAATAAAGATGAGTGATCTACC  
AGAAAAAAAAAAAA

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**FIGURE 2345**

MAAKMEITLSSNTEASSKQERHIIAKLEEKRGPPLOKNCDPPELCRQSFRRFCYQEVSGPQEALSQLRQLCRQWL  
QPELHTKEQILELLVMEQFLTILPPEIQARVRHRCMPSSKEIVTLVEDFHRASKKPKQWVAVCMQGGQKVLEKTG  
SQLGEQELPDFQPQTPRRDLRESSPAEPSQAGAYDRLSPHHWEKSPLLQEPKLAGTEAPRMRSDNKENPQQEG  
AKGAKPCAVSAGRSKGNLQNPPEPRGANMSEPRLSRQVSSPNAQKPFQAHYQRHCRVEYISSPLKSHPLRELKKS  
KGGKRSLSNRLQHLGHQPTRSAKKPYKCDDCGKSFTWNSELKRHKRVHTGERPYTCGECGNCFGRQSTLKLHQRI  
HTGEKPYQCGQCGKSFRQSSNLHQHRLHHGD



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**FIGURE 2346**

TTTGGGTTAGGGAGAGTGCTTTTCGTTTGTGTTTAAATGGGAGAACTGGAGCATGTTGCCAAGGCAGAGAGCCAGC  
AGAGAGGGGTGAATGGAAGAAGGAGCGAGAAGGGGGTTACTGACGAAGCCTTATCCTGGAGGAGAGAAGGATGGA  
CTCCAGAGCCCAGCTTTGGGGACTGGCCTTGAATAAAAGGAGGGCCACTCTACCTCATCCTGGAGGGAGCACGAA  
CCTAAAGGCAGACCCAGAAGAGCTTTTTACAAAAGTAAAGGAAATGGGAAGGGCTCCTTTGGAGAGGTGTTCAA  
AGGCATTGACAATCGGACTCAGAAAGTGGTTGCCATAAAGATCATTGATCTGGAAGAAGCTGAAGATGAGATAGA  
GGACATTCAACAAGAAATCACAGTGCTGAGTCAGTGTGACAGTCCATATGTAACCAATATTATGGATCCTATCT  
GAAGGATACAAAATTATGGATAATAATGGAATATCTTGGTGGAGGCTCCGCACTAGATCTATTAGAACCTGGCCC  
ATTAGATGAAACCCAGATCGCTACTATATTAAGAGAAATACTGAAAGGACTCGATTATCTCCATTCGGAGAAGAA  
AATCCACAGAGACATTAAAGCGGCCAACGTCTGTCTGAGCATGGCGAGGTGAAGCTGGCGGACTTTGGCGT  
GGCTGGCCAGCTGACAGACACCCAGATCAAAAGGAACACCTTCGTGGGCACCCCATCTGGATGGCACCCGAGGT  
CATCAAACAGTCGGCCTATGACTCGAAGGCAGACATCTGGTCCCTGGGCATAACAGCTATTGAACCTGCAAGAGG  
GGAACCACTCATTCCGAGCTGCACCCCATGAAAGTTTTATTCCCTCATTCCAAAGAACAACCCACCGACGTTGGA  
AGGAACTACAGTAAACCCCTCAAGGAGTTTGTGGAGGCCTGTTGAATAAGGAGCCGAGCTTTAGACCCACTGC  
TAAGGAGTTATTGAAGCACAAGTTTATACTACGCAATGCAAAGAAACTTCCTACTTGACCGAGCTCATCGACAG  
GTACAAGAGATGGAAGGCCGAGCAGACCCATGACGACTCGAGCTCCGAGGATTCCGACGCGGAAACAGATGGCCA  
AGCCTCGGGGGGCGAGTATTCTGGGGACTGGATCTTCACAATCCGAGAAAAAGATCCCAAGAATCTCGAGAATGG  
AGCTCTTCAGCCATCGGACTTGGACAGAAATAAGATGAAAGACATCCCAAAGAGGCCTTTCTCTCAGTGTGTTATC  
TACAATTATTTCTCCTCTGTTTGAGAGTTGAAGGAGAAGAGCCAGGCGTGCGGAGGGAACTTGGGGTCCATTGA  
AGAGCTGCGAGGGGCCATCTACCTAGCGGAGGAGGCGTGCCCTGGCATCTCCGACACCATGGTGGCCAGCTCGT  
GCAGCGGCTCCAGAGATACTCTCTAAGTGGTGGAGGAACCTTCATCCCACTGAAATTCCTTTGGCATTGTTGGGGTTT  
TGTTTTTCCTTTTTTCTTCTTCATCCTCCTCTTTTTTAAAGTCAACGAGAGCCTTCGCTGACTCCACCGAAG  
AGGTGCGCCACTGGGAGCCACCCAGCGCCAGGCGCCCTCCAGGGACACACAGTCTTCACTGTGCTGCAGCC  
AGATGAAGTCTCTCAGATGGGTGGGGAGGGTCAGTCTCTCCAGCGATCATTGTTTATTTTATTACTTTTGT  
TTTTAATTTTAACCATAGTGCACATATTCAGGAAAGTGTCTTTAAAAACAAAAACAAACCCTGAAATGTATATT  
TGGGATTATGATAAGGCAACTAAAGACATGAAACCTCAGGTATCCTGCTTTAAGTTGATAACTCCCTCTGGAGCT  
TGGAGAAATCGCTCTGGTGGATGGGTGTACAGATTTGTATATAATGTCATTTTACGGAAACCCCTTCGGCGTGCA  
TAAGGAATCAGTGTGTACAACTGGCCAAGTGCTTCTGTAGATAACGTCAGTGGAGTAAATATTCGACAGGCCAT  
AAACTTGAGTCTATTGCCTTGCCCTTTATTACATGTACATTTGAATTCTGTGACCAGTGATTGGGTTTTATTTT  
GTATTTGCAGGGTTTGTCTTAATAATTAATGCCCCCTCTCTTACAGAACACTCCTATTTGTACCTCAACAAATGC  
AAATTTTCCCCGTTTGGCCCTACGCCCCCTTTGGTACACCTAGAGGTTGATTTCCTTTTTTCATCGATGGTACTATT  
TCTTAGTGTTTTAAATTGGAACATATCTTGCCCTCATGAAGCTTTAAATTATAATTTTCAGTTCTCCCCATGAAG  
CGCTCTCGTCTGACATTTGTTTGAATCGTGCCACTGCTGGTCTGCGCCAGATGTACCGTCCTTTCCAATACGAT  
TTTCTGTTGCACCTTGTAGTGGATTCTGCATATCATCTTCCACCTAAAAATGTCTGAATGCTTACACAAATAA  
ATTTTATAACACGCTTAAAAAAAAAAAAA

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**FIGURE 2347**

MAHSPVQSGLPGMQNLKADPEELFTKLEKIGKGSFGEVFKGIDNRTQKVVAIKIIDLEEADEIEDIQQEITVLS  
QCDSFYVTKYYGSKDKLWIIMEYLGGSALDLLEPGPLDETQIATILREILKGLDYLHSEKKIHRDIKAANV  
LLSEHGEVKLADFGVAGQLTDTQIKRNTFVGTPFWMAPEVIKQSAYDSKADIWSLGITAIELARGEPPHSELHPM  
KVLFLIPKNNPPTLEGNYSKPLKEFVEACLNKEPSFRPTAKELLKHKFILRNAKTSYLTTELIDRYKRWKAQESH  
DDSSSESDAETDQASGGSDSGDWIFTIREKDPKNLENGALQPSDLDRNKMKDIPKRPFSQLSTIISPLFAEL  
KEKSQACGGNLGSIEELRGAIYLAEEVCPGISDTMVAQLVQRLQRYSLSGGGTSSH

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**FIGURE 2348**

CGGGCTCCAGCGGCTCCCGCGCCGAACCTCCTCCTCGGCGAAGTCTCCCTGGCCGCCCC**ATGT**CGGCCGCCCC  
CGCCTACAGCGAAGACAAGGGCGGCTCCGCTGGCCCCGGGGAGCCCGAGTACGGCCACGACCCCGCGAGCGGCGG  
CATCTTCTCCTCCGACTACAAGCGGCATGATGACCTGAAGGAGATGCTGGACACCAACAAGGATTCTCTCAAGCT  
GGAGGCCATGAAGAGGATTGTGGCGATGATTGCCCGAGGAAAGAATGCTTCAGACCTGTTTTCCCGCGGTGGTGAA  
GAACGTGGCCTGTAAGAACATAGAGGTGAAGAAGCTTGTCTATGTGTACCTGGTACGCTACGCTGAGGAGCAGCA  
AGACCTGGCCCTGCTGTCCATCTCCACCTTCCAACGTGGCCTAAAGGATCCCAACCAGCTGATTCTGTGCCAGTGC  
CCTCCGTGTCTCTCTAGCATCCGTGTGCCCATCATAGTGCCCATCATGATGCTAGCTATCAAGGAAGCCGCCTC  
GGACATGTACCCCTATGTGCGGAAAACAGCTGCCACGCCATCCCTAAACTCTACAGTTTGGACTCTGACCAGAA  
GGATCAGCTGATAGAAGTCATTGAGAAGCTTCTGGCTGACAAGACCACGCTGGTGGCGGGCAGTGTGGTGATGGC  
CTTTGAGGAGGTCTGCCCCGAGCGCATCGACCTGATTACAAAACTACCGGAAACTCTGTAACCTGCTGATCGA  
CGTGAGGAGTGGGGCCAGGTGGTCATCATCAGCATGCTCACCCGCTACGCCCCGACGCAGTTCTTGAGCCCCAC  
CCAGAACGAATCCCTACTAGAGGAGAACGCGGAAAAGCCTTCTACGGCTCAGAGGAGGACGAGGCCAAGGGCGC  
GGGGTCTGAGGAGACGGCCGCCGCGCGCCGCCCTCCCGAAAGCCCTATGTATGGAACCCCGACCACCGGCTGCT  
GCTGCGCAACACCAAACCCCTGCTGCAGAGCCGACGCGCGCGGTGGTGATGGCGGTGGCGCAGCTCTACTTCCA  
CCTGGGCCCCAAGGCGGAAGTGGCGTCATCGCCAAGGCGCTGGTGCCTGCTGCGCAGCCACAGTGAGGTGCAGTA  
CGTTGTCTCCAGAACGTGGCCACCATGTCCATCAAGCGCCGGGGTATGTTTGAGCCCTACCTGAAGAGCTTCTA  
CATCAGGTCCACCGACCCACCCAGATTAAGATCTGAAGCTGGAAGTGTGTGACCAACCTGGCCAATGAGACCAA  
CATTCTACTGTCTACGGGAATTCCAGACCTATATTCGCAGCATGGACAAGGACTTTGTGGCAGCCACAATCCA  
GGCCATTGGACGCTGTGCAACTAACATCGGCCGAGTCCGTGACACCTGCCTCAATGGCCTGGTGCAGCTGCTGTC  
CAACCGTGATGAGCTTGTGGTTGCAGAGTCAGTGGTTCATTAAAGAAATTGCTACAGATGCAGCCAGCACAA  
TGGAGAGATCATCAAACTTTGGCAAAGCTTACAGACAACATCCAGGTGCCCATGGCCCCGAGCCAGCATCCTGTG  
GCTCATCGGAGAGTACTGTGAGCATGTCCCCAGGATTGCACCTGATGTCTTAAGAAAAATGGCCAAGTCATTAC  
AGCAGAGGAGGATATTGTCAAGCTGCAGGTTCATCAACCTGGCAGCCAAGCTCTACCTGACCAACTCTAAACAGAC  
CAAGCTGTGACCCAGTATGTGCTGAGTCTGGCCAAATATGACCAGAACTATGATATTCGCGACCGGGCGCGCTT  
CACCCGGCAGCTCATCGTCCCTTCCGAGCAGGGTGGGGCCCTCAGCCGCCATGCCAAGAAGCTCTTCTGGCACC  
CAAACAGCTCCAGTCTTGAGTTCATCTTCAAAGACCGGGACCACTTCCAGCTGGGCTCACTGTCCCACCTGCT  
TAATGCCAAGGCCACAGGCTACCAGGAGTCCAGACTGGCCGGAGGAAGCCCCAGACCCATCTGTGCGCAACGT  
GGAGGTACCTGAATGGACCAAGTGCTCAAATCGGGAGAAGAGAAAGGAGAAGGAAAAACCTTCTACTCGGACTC  
TGAGGGGGAGTCAGGCCCCACGGAGTCCGACAGTGAACCTGAGTCTGAGAGTGAATCGGACAGTAAGAGCAG  
CAGTGAGAGCGGCTCTGGGGAGTCCAGCAGTGAGTCCGACAATGAAGACCAGGATGAGGATGAGGAGAAAGGGAG  
AGGCAGTGAGAGTGAACAGAGTGAGGAGGATGGTAAGAGGAAGACAAAGAAGAAGGTGCCAGAGAGAAAGGAGA  
AGCGTCATCCTCTGATGAGGGCAGCGATTCCAGCAGTAGCTCATCAGAGTCCGAGATGACATCGGAGTCCGAGGA  
GGAGCAGTTAGAACCTGCCTCCTGGAGCAGGAAAACACCTCCAGCAGCAAAAGTGCTCCTGCAACCAAGGAGAT  
CTCCCTGCTTGATCTAGAGGATTTACCCCTCCAGTGTCCAGCCTGTGTCTCCCCAGCAATTGTGTCTACCAG  
TCTGGCTGCTGACCTGGAGGGCTGACACTCACAGACTCCACCCTGGTACCGTCGCTTCTGAGTCCAGTATCGGG  
TGTTGGGCGGCAGGAGCTGCTGCACCGGTAGCTGGCGAGGGGCTGGCTGTGGACTACACCTTCAGCCGCCAACCC  
TTTCTCCGGGGATCCCCACATGGTGTCCGTGCACATCCACTTCTCCAACAGCTCTGATACCCCATCAAGGGCCT  
GCAATGTGGGCACTCCCAAACCTGCCTGCTGGCATCAGCATCCAAGAATTTCCGAAATTGAGTCCCTGGCACCTGG  
AGAATCTGCCACTGCTGTAATGGGCATTAAATTTCTGTGACTCAACCCAGGACGCCAACTTCCAGCTGTGACCCCA  
GACCCGACAGTTCTACGTCTCCATTACGCCACCTGTTGGGGAGCTGATGGCCCTGTGTTTATGAGTGAATAATGA  
GTTAAGAAGGAACAGGGAAAGCTGATGGGCATGAATGAGATCACAGAGAACTCATGCTGCCAGACACCTGTGCG  
GAGTGACCACATTGTGGTGCAGAAAGTGACTGCCACTGCCAACCTGGGTGCTGTCTTGTGGGACATCTGATGA  
GTACAGGTTTGCAGGGAGGACACTGACTGGTGAAGCCTCGTTCTGCTGACCTGGATGCCCGGCCAGCTGGAGC  
TGCCAGCTGACTGTCAACAGCGAGAAAATGGTGATTGGCACCATGCTGGTAAAGGATGTGATACAGGCTCTGAC  
CCAG**TGA**CTTCCAAATGCTGTGACCTGTTTGGCTCCCATCTATACCTCCCCATGACACCTAGGCTGTCAGTCTCT  
CTCATCTTCTCTCTCTCTCATCATCTCTCATGCCAGATAGCATTCAGGGTGTCTCTCTCCCC

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**FIGURE 2349**

MSAAPAYSEDKGGSSAGPGEPEYGHDPASGGIFSSDYKRHDDLKEMLDTNKDSLKLEAMKRIVAMIARGKNASDLF  
PAVVKNVACKNIEVKKLIVYVYLVRYAEQQDLALLSISTFQRGLKDPNQLIRASALRVLSSIRVPIIVPIMMLAI  
KEAASDMSPYVRKTAHAIPKLYSLDSQKDQLIEVIEKLLADKTTLVAGSVVMAFEEVCPERIDLIHKNYRKLK  
NLLIDVEEWGQVVIISMLTRYARTQFLSPTQNESLLEENAEKAFYGSEDEAKGAGSEETAAAAAPSRKPYVMDP  
DHRLRLRNTKPLLQSRSAAVVMAVAQLYFHLGPRRWRHRQGAGALLRSHSEVQYVVLQNVATMSIKRRGMFEPY  
LKSFYIRSTDPTQIKILKLEVLTLNLANETNIPTVLREFQTYIRSMKDFVAATIQAIGRCATNIGRVRDTCLNGL  
VQLLSNRDELVVAESVVVIKKLLQMQPAQHGEI IKHLAKLTDNIQVPMARASILWLGIEYCEHVPRIAPDVLKRM  
AKSFIAEEDIVKLQVINLAAKLYLTNSKQTKLLTQYVLSLAKYDQNYDIRDRARFTRQLIVPSEQGGALSRHAKK  
LFLAPKPAPVLESSFKDRDHFQLGSLSHLLNAKATGYQELPDWPEEAPDPSVRNVEVPEWTKCSNREKRKEKEKP  
FYSDSEGESGPTESADSDPESESESDSKSSSESGSGESSESSEDNEDQDEDEEKGRGSESEQSEEDGKRKTKKKVP  
ERKGEASSSDEGSDSSSSSESEMTSESEEEQLEPASWSRKTTPSSKSAPATKEISLLDLEDFTPPSVQPVSPPA  
IVSTSLAADLEGLTLLTDSTLVPSLLSPVSGVGRQELLHRVAGEGLAVDYTF SRQPFSGDPHMSVHIHFSNSSDT  
PIKGLHVGT PKLPAGISIQEFPEIESLAPGESATAVMGINFCDSTQAANFQLCTQTRQFYVSIQPPVGELMAPVF  
MSENEFKKEQGKLMGMNEITEKLMPLDTCRSDHIVVQKVTATANLGRVPCGTSDEYRFAGRTLTGGSVLVLLTDA  
RPAGAAQLTVNSEKMOVIGTMLVKDVIQALTQ

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**FIGURE 2350**

CAGACGGCGCTGAGCGCGGCGGGGAGCGGCGTTCGAGTGTCTCCGTGCGCCCGTCTGTGGCCAAGCAGCCA  
GCAGCCTAGCAGCCAGTCAGCTTGCCGCGGCGGCCAAGCAGCCAACC**ATG**CTCAACTTCGGTGCCTCTCTCCAG  
CAGACTGCGGAGGAAAGAATGGAATGATTTCTGAAAGGCCAAAAGAGAGTATGTATTCTGGAACAAAACCTGCA  
GAGAAAAGTGATTTTGAAGCTGTAGAAGCACTTATGTCATGAGCTGCAGTTGGAAGTCTGATTTTAAGAAATAC  
GTTGAAAACAGACCTGTTACACCAGTATCTGATTTGTGAGGGAAGAGAATCTGCTTCCGGGAACACCTGATTTT  
CATACAATCCCAGCATTTTGTGTTGACTCCACCTTACAGTCTCTGACTTTGAACCTCTCAAGTGTCAAATCTG  
ATGGCACCAGCGCCATCTACTGTACACTTCAAGTCACTCTCAGATACTGCCAAACCTCACATTGCCGCACCTTTC  
AAAGAGGAAGAAAAGAGCCAGTATCTGCCCCAAACTCCCCAAAGCTCAGGCAACAAGTGTGATTTCGTACATACA  
GCTGATGCCAGCTATGTAACCACCAGACCTGCCAATGAAAGCAGCCAGCATCCTCAACTATCAGAACAATTCT  
TTTGAAGAAGAACCACCTAAATGTTGAGGCTGCAAGAAAGAACATACCATGTGCCGCTGTGTACCAAACAGA  
TCCAAATGTGAGAGAAACACAGTGGCAGATGTTGATGAGAAAGCAAGTGTGCTGACTTTATGACTTTTCTGTGCC  
TCCTCAGAGACGGTCATCTGCAGGTCTCAGCCAGCCCCGTGTGTCCCAACAAGAGTCAAGTGTGGTCTCTCCA  
CCTGCAGTATCTGCAGGGGAGTGCCACCTATGCCGGTCATCTGCCAGATGGTTCCTTCCCTGCCAACACCCCT  
GTTGTGACAACAGTCTGTTCCAGCACTCTCCAGCCAGCCAGCCAGCCGTTTGGCCCCCTGTTGTGTTTATGGGC  
ACACAAGTCCCCAAAGGCGCTGTCATGTTTGTGGTACCCAGCCGTTGTGTCAGAGTTCAAAGCCTCCGGTGGTG  
AGCCCGAATGGCACCAGACTCTCTCCATTGCCCTGCTCCTGGGTTTTCCCTTCAGCAGCAAAAGTCACTCCT  
CAGATTGATTCATCAAGGATAAGGAGTCACATCTGTAGCCACCCAGGATGTGGCAAGACATACTTTAAAGTTCC  
CATCTGAAGGCCACACGAGGACGCACACAGGAGAAAAGCCTTTTCAAGTGTAGCTGGAAAGGTTGTGAAAGGAGG  
TTTGCCCGTTCTGATGAAGTGTCCAGACACAGGCGAACCCACACGGGTGAGAAGAAATTTGCGTGCCCATGTGT  
GACCGGCGGTTTATGAGGAGTGACATTTGACCAAGCATGCCCGGCGCCATCTATCAGCCAAGAAGCTACCAAAC  
TGGCAGATGGAAGTGAGCAAGCTAAATGACATTGCTCTACCTCCAACCCCTGCTCCCAACAGT**GAC**CAGACCGGA  
AAGTGAAGAGTCAGAACTAACTTTGGTCTCAGCGGAGGCCAGTGGTGATGTAAAAATGCTTCCACTGCAAGTCTG  
TGGCCCCACAACGTGGGCTTAAAGCAGAAGCCCCACAGCCTGGCACGAAGGCCCCGCTGGGTTAGGTGACTAAA  
AGGGCTTCGGCCACAGGCAGGTCACAGAAAGGCAGGTTTCATTTCTTATCACATAAGAGAGATGAGAAAGCTTTT  
ATTCTTTGAATATTTTTTGAAGGTTTCAGATGAGGTCAACACAGGTAGCACAGATTTTGAATCTGTGTGCATAT  
TTGTTACTTTTACTTTTGTGTTTATACTTGAGACCACTTTTCAATGTGATTCTTCTAAAGCACTGGTTTCAAGA  
ATATGGAGGCTGGAAGGAAATAAACATTACGGTACAGACATGGAGATGTAAATGAGTTTGTATTATTACAAATA  
TTGTCATCTTTTTCTAGAGTTATCTTTTATTATTCTTAGTCTTTCCAGTCAACATCGTGGATGTAGTGATTAA  
ATATATCTAGAATATCATTTTTTACACTATTGTGAATATTTGGAATTGAACGACTGTATATTGCTAAGAGGGCCC  
AAAGAATTGGAATCCTCCTTAATTTAATTGCTTTGAAGCATAGCTACAATTTGTTTTGCATTTTTGTGTTTGA  
GTTTAACAAATGACTGTATCTAGGCATTTTATTATGCTTTGAACCTTTAGTTTGCCTGCAGTTTCTTGTGTAGATT  
TGAAAATTGTATACCAATGTGTTTTCTGTAGACTCTAAGATACACTGCACTTTGTTTAGAAAAAAACTGAAGAT  
GAAATATATATTGTAAAGGAGGATATTAAGAATCTTAGATAACTTCTTGAAAAGATGGCTTATGTCATCAGTA  
AAGTACCTTTATGTTATGAGGATATAATGTGTGCTTTATTGAATTAGAAAATTAGTGACCATTTATTCACAGGTGG  
ACAAATGTTGTCTGTTAATTTATAGGAGTTTTTGGGGATGTGGAGGTAGTTGGGTAGAAAAATTATTAGAACA  
TTCACTTTTGTAAACAGTATTTCTCTTTTATTCTGTTATATAGTGGATGATATACACAGTGGCAAAACAAAAGTA  
CATTGCTTAAATATATAGTGAAAAATGTCATATATCTTCCATTTAACATTGTTTTTGTATATTGGGTGTAGA  
TTTCTGACATCAAACTTGGACCTTGGAAAACAAAAGTTTTAATTAATAAAAAATCCTTGTGACTTACAATTTGC  
ACAATATTCTTTTGTGTACTTTATATCTTGTTTACAATAAAGAATTC

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**FIGURE 2351**

MLNFGASLQQTAEERMESISERPKE SMYSWNKTAEKSDFEAVEALMSMSCSWKSDFKKYVENRPVTPVSDLSEEE  
NLLPGTPDFHTIPAFCLTPPYSPSDFEPSQVSNLMA PAPSTVHFKSLSDTAKPHIAAPFKEEEKSPVSAPKLEKA  
QATSVIRHTADAQLCNHQTCPMKAASILNYQNNSFRRRTHLNVEAARKNIPCAAVSPNRSKCERNIVADVDEKAS  
AALYDFSVPSSSETVICRSQPAPVSPQQKSVLVSPPAVSAGGVPPMPVICQMVPLPANNPVVTVVPSTPPSQPPA  
VCPVVFMGTQVPKGAVMFVVPQPVVQSSKPPVSPNGTRLSP IAPAPGFSPSAKVTPQIDSSRIRSHICSHPG  
CGKTYFKSSHLKAHTRTHTGEKPFSCSWKGCERRFARSDEL SRHRTHTGEKKFACPMCDRRFMRS DHLT KHARR  
HLSAKKL PNWQMEVSKLNDIALPPTPAPTQ

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**FIGURE 2352**

GAAC TGGTGGCAGT GAGAGACTTCGGCGGACATGGCTCCCAGCGTGCCAGCGGCAGAACCCGAGTATCCTAAAGG  
CATCCGGGCCGTGCTGCTGGGGCCTCCCGGGCCGGTAAAGGGACCCAGGCACCCAGATTGGCTGAAAACCTCTG  
TGCTGCCATTTAGCTACTGGGGACATGCTGAGGGCCATGGTGGCTTCTGGCTCAGAGCTAGGAAAAAGCTGAA  
GGCAACTATGGATGCTGGGAACTGGTGAGTGATGAAATGGTAGTGAGCTCATTGAGAAGAATTTGGAGACCCC  
CTTGCTGCAAAAATGGTTTTCTTCTGGATGGCTTCCCTCGGACTGTGAGGCAGGCAGAAATGCTCGATGACCTCAT  
GGAGAAGAGGAAAGAGAAGCTTGATTCTGTGATTGAATTCAGCATCCCAGACTCTCTGCTGATCCGAAGAATCAC  
AGGAAGGCTGATTACCCCCAAGAGTGGCCGTTCTACCACGAGGAGTTCAACCCTCCAAAAGAGCCCATGAAAGA  
TGACATCACCGGGGAACCCCTTGATCCGTCGATCAGATGATAATGAAAAGGCCTTGAAAATCCGCCTGCAAGCCTA  
CCACACTCAAACACCCCACTCATAGAGTACTACAGGAAACGGGGGATCCACTCCGCCATCGATGCATCCCAGAC  
CCCCGATGTCGTGTTGCAAGCATCTTAGCAGCCTTCTCCAAAGCCACATCCTAGTATCAGAAGGCCAGGCGAGA  
CTGCAACACTGCTCATCACCCCGGGCGTGATCCCTGCTCTTAGGTGCTGGGCAGAGGGGAAGGGTGGTCAGGGT  
GAGGATGGTGAGGGAGGGCTGGTGAGGGGCTCAGAGGAATACTTGAACAACAGCAGTGTTATTGTAGTGTGGCA  
GTTTCTTTTATACATAGGTGAGAGTTTTTAAAGTGTAAGGGAAAAATTAATTTTTTAAAAAACACCATGCTTGGA  
GGGTGGGGGTAGAAATAGACACAATATTATTTCTAAGGAATCGGGTTTTTCACTTCTGACTGGTGAAAATAT  
TTTTTAAAGCCAGTGCTCTAAGACCTCAGCTTTTATCTCAGAACCCCATGGGTTCCAGACCAAGAGTACAGGAAA  
TCAAATTGTTGCTCTGTCTATAGCTTGGAACAGGGAGCTTTGATTACTGACTCCGGTTCCACACACTGTAA  
GATCAAAAAACCATCTCCACATTTGAAAGAGATGTAAGGTGTATTATAGGGATGGTGGCTCAACAAATCAAGCA  
AACTGGAATCAAGGGGAGGGGGAAGGGAATGAAATGGAAGGGAGGCTGATTCCCTTCCCTGACTTACCACTAA  
TTTACTAGGCTACCTACTTTTCATGAGTAACCTCTCACAGCTACCCAGCACATGCCACAATCCTATCGTCTTGCT  
TCTTTTATCTGCACTGTGTGAAGGGACTCTTTTAAATAAATGAGCAAGTGTCCTAAGCTATGTATCCAAAGATT  
GTCCTTTCCATTCTCAAATCCTGTGACTGGGATCACTCAACAGCACTGTGATGTATTATTTTCAATGAGGTGCCT  
TTCTTAAGTACCAATGCTGCCTTGTGTCCTTAAATCAATAAAATATGTTAAATTTGTATCCCTGTTGT  
GGCATTTTTTTTAGATAATCTAAGCTAGAAAAATGACATTGAATTTCTGGACCTGGCTGGAAGGAAAAGAGCCCT  
TTCTTGCTGCTGGCAGCTGTGTGGTAGGAGGTCCAAGTATGTGCATATGAGATAAGCCTGCAACCTCTTGACCTT  
CAGCTCCTATGCAGGCTTCTCTTGAGCCAGAGACAAGGCAGCTTGGTCTAGTGGAGATAGCACTGTGCTTGGAG  
TTCAGGGGACCTAGGACAAATCCAGCCAGTTAGTTATTCACTGTGCTCCTGTTTCTCAGCTGAAAAAGGAAGT  
TGGTTATGCCACCTTCTTGCCCTTAATGGCATTAAATGAAATTTATAGGAAGAAGGTTTTTGCTCAGTACCTGGC  
ATGCAACAGACATTGGATAAATGTTAGTTGGATCCAGATATACACAGAAAGATATCTGCTTCTGCCAGGCTGGA  
TAACTGTTGAATGACACTGTCCATAGTCTAGA

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**FIGURE 2353**

MAPSVPAAEPEYPKGIRAVLLGPPGAGKGTQAPRLAENFCVCHLATGDMLRAMVASGSELGKKLKATMDAGKLVS  
DEMVELIEKNLETPLCKNGFLLDGFPRTVRQAEMLDDLMEKRKEKLDSVIEFSIPDSLLIRRIITGRLIHPKSGR  
SYHEEFNPPKEPMKDDITGEPLIRRSDDNEKALKIRLQAYHTQTTPLEYYRKRGIHSAIDASQTPDVVFASILA  
AFSKATS



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**FIGURE 2354A**

GCTTGGGGCCGCCATCTTGGCAAGAGGCGAAGCGGCAGCGGTTCTGTCAAGGGGGCAGCAGGTCCAGAGCTGCT  
GGTGCTCCCGTTCCCCAGACCTACCCCTATCCCCAGTGGAGCCGGAGTGGGGCGCGCCCCACCACCGCCCTCA  
CCATGGTGCTGTTGGCAGCAGCGGTCTGCACAAAAGCAGGAAAGGCTATTGTTTCTCGACAGTTTGTGGAAATGA  
CCCGAATCTCGGATTGAGGGCTTATTAGCAGCTTTTCCAAAGCTCATGAACACTGGAAAACAACATACGTTTGTG  
AAACAGAGAGTGTAAGATATGTCTACCAGCCTATGGAGAACTGTATATGGTACTGATCACTACCAAAAACAGCA  
ACATTTTGAAGATTTGGAGACCTAAGGCTCTTCTCAAGAGTGATCCCTGAATATTGCCGAGCCTTAGAAGAGA  
ATGAAATATCTGAGCACTGTTTGTATTGATTTTGTCTTTTGTATGAAATTGTCGCACTGGGATACCGGGAGAATG  
TTAAGTTGGCAGATCAGAACCTTCACAGAAATGGATTCTCATGAGGAGAAGGTGTTTCAGAGCCGTCAGAGAGA  
CTCAAGAACGTGAAGCTAAGGCTGAGATGCGTCGTAAAGCAAAGGAATTACAACAGGCCCGAAGAGATGCAGAGA  
GACAGGGCAAAAAAGCACCAGGATTGCGGATTGTCAGCTCTGCAGTATCTGGAGGCAGCAGCTGCCATGA  
TCACAGAGACCATCATTGAACTGATAAACCAAAAGTGGCACCTGCACCAGCCAGGCCTTCAGGCCCCAGCAAGG  
CTTTAAACTTGGAGCCAAAGGAAAGGAAGTAGATAACTTTGTGGACAAATTAATCTGAAGGTGAAACCATCA  
TGCTCTCTAGTATGGGCAAGCGTACTTCTGAAGCAACCAAAATGCATGCTCCACCCATTAATATGGAAGTGTAC  
ATATGAAGATTGAAGAAAAGATAACATTAACCTGTGGACGAGACGGAGGATTACAGAATATGGAGTTGCATGGCA  
TGATCATGCTTAGGATCTCAGATGACAAGTATGGCCGAATTCGTCTTCATGTGGAATGAAGATAAGAAAGGGG  
TGCAGCTACAGACCCATCCAATGTGGATAAAAACTTTTCACTGCAGAGTCTCTAATTGGCCTGAAGAATCCAG  
AGAAGTCATTTCCAGTCAACAGTGACGTAGGGGTGCTAAAGTGGAGACTACAAACCACAGAGGAATCTTTTATTC  
CACTGACAATTAATTGCTGGCCCTCGGAGAGTGGAAATGGCTGTGATGTCAACATAGAATATGAGCTACAAGAAG  
ATAATTTAGAAGTGAATGATGTGGTTATCACCATCCCACTCCCGTCTGGTGTGCGCGCGCCTGTTATCGGTGAGA  
TCGATGGGGAGTATCGACATGACAGTCGACGAAATACCCTGGAGTGGTGCCTGCCTGTGATTGATGCCAAAATA  
AGAGTGGCAGCCTGGAGTTTAGCATTGCTGGGCAGCCCAATGACTTCTTCCCTGTTCAGTTTCTTTGTCTCCA  
AGAAAAATTACTGTAACATACAGGTTACCAAGTGACCCAGGTAGATGGAAACAGCCCCGTGAGTTTTCACAG  
AGACCACTTTCTAGTGATAAGTATGAAATTCGTAAATACCAAGAAGAGGGAGCTGAAAAGGAAAATTTTCAGA  
TTAATAAAGAAGACGCAATGATGGCTGAAGAGTTTTTCCAGATTACAAGCCACTGGAGACCCCTTTTTCTG  
ATACAATGCACGATTCTCTGCGCGCAAGGACCCTCGACTCACCCCATGTTTCAGTGTACAGAGACATTCTTG  
ATAAGGAAATGGCACAACATAAAGGAAAGGCTGCTAATTTTCTTTGGCAGATTGTATTGGCCAGCAGGAAAGC  
AAGCTCTCCAGAGAATGCCCCAGTTAAATACCTCCTTACCTTTACCTAAGTTGCTCCTTTATTTTTATTTAT  
TATTATTATTATTATTATTATTTTTTGGAGATGGAGTCTCACTTTGTAACCCAGGCTGGAATGCAATGGCATGATC  
TCAGCTCACTGCAACCTCCGCTCCTGGGTTCAAGCAAGTCTCCTGCCTCAGCCTCCGAGTAGCTGGGACTACAG  
GTGCAGCCACCACGCTGGCTAATTTTTTGTATTTTAGTAGAGACGGGGTTTACCCTGTTGCCAGGCTGGTC  
GCGAATCCTGAGCTCAGGCAATCCGCCACCTCAGCCTCCCAAAGTGTGGGATTACAGGCATGAGCCACCATG  
CCCAGCTGCTCCTTTATTTAATCCCTAAATATAATCCCTAAATATAGTTATATTTTCACTTAGTTTGTTTTA  
AAAAGTTTCTCTGTAGAAAATTTTAAATCATTACACCTTTACCTTTAGGTTTTTCTTTCTATACATTCACTCA  
GGCACTGGGATCATCTGTTTACAGGCATTATTTTATTTGGCACTCCTGGAACAAGTATATCTAACCCATTCTTG  
ATTTTTGGACTATTTCAGGTGAACATTATTTGAGGGGTATGGGGTCTAGAAGTTAAAAGATACGCATGTCTTCTGTTC  
TTTTCCCGTATCAATTCATTCCCTTCATCTCTTTGCCAAGTTGTTTTCTTTTCAGGGCCTGTCCTTCCAGTTTGA  
ACAGTACCATGAATCCCACTTGTGTCAATATTAAAGATAGCTGAGAAGCACCTTTCAAATGGCACAGTCCCTCTT  
CAAGATGTCTAAAAGAATGGTTATGTCTGTCCAGTTAGGGATTTCACATCCACATGTAATCATGTCTGTCTGT  
TGCTACCCAAATTTTCATTTCTCCACATTTTGGGTACTTAAGCTAAAACGTAATGGCCACAGTCTGTAATCCATT  
CACATTCCTCAGTTTACCACCTCCCTCTTCCAGACTGCCTCTCTGTATCAGTCCCTCCTTTCTAACAGAAA  
TGGGGTTATGATTTTGAAGGCTGTGGGTTTCAGGGAGTCTTTGCCAATCCTGTGGCCCTAACTATCAAGGAGGC  
TCCATTTACCAATTTGATTTTTTGCATTTTCAGGAGGCAACTGATTGTTTCGATATGTACATATTACTCACGTATA  
CCCCATTTCTTCCAGTCAGCCCAACATTTTCCACAGTCTGTCCCATCTCTGAAATCCTTCTCTCTTTCCC  
CCTAAGTCTTTTGTGTCTCATGTACTGGTGGTTTCTCGGTTCCATCTCATCCATTTCTTTTCAATGGAGAC  
TACAGCGTCAGCCAGCTCAGCCTTGGCTTTTAACTCAATATTCAGTCCATAGGGGTGGTTAAAAGTTGCTGCAA  
GGCTGCAGGCACTGGCAGTGGGAAGAGGCAGACGACTAGATGACTTCTGCACTTTTAGCTGGTTGAAAAGTACCA  
CTCCCACTCTGAACATCTGGCCGTCCCTGCAAGAGTGTACTGTGCTTGAAGCAGAGCACTCACACATAAATGGC  
TGTGTGTGGAATTGCTTGCCAAAGAAGTTTCTAGCCTTTCCCTTTCCCTAAGTGCATCAGGGAAGAATTCTTAT

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**FIGURE 2354B**

CTCTAGCTTGGTTTCCACATGAGGTTTTCTGAGAAGGGCTTGGGACAAGAAGTCTGTCATGTTAGTTAAGCAGG  
CAAGAAATCCTACTAATCCAGTTTTGTTTGAAAGTTGTTTGCCGTATGATTTTTTAAAAGTCAAGTTTAATTTC  
AAAAAACCTTTTTTTCTGAGATTACTTTTGGGGTAATATTTAAATGAGAGACATTTTGTAAACCCTGTAAAATA  
CATAGGGAATATAACATTCCAGTGTATACAAAGAAGGCAAATCTTTAATCAAATAAAGCGTATTATAAATGAG  
AAAAAAAAAAAAAAAAA

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**FIGURE 2355**

MVLLAAAVCTKAGKAIVSRQFVEMTRTRIEGLLAAFPCLMNTGKQHTFVETESVRYVYQPMKLYMVLITTKNSN  
ILEDLETIRLFSRVIPEYCRAL EENEISEHCFDLIFAFDEIVALGYRENVNLAQIRTFTEMDSHEEKVFRVRET  
QEREAKAEMRRKAKELQQARRDAERQGKKAPGGFGSSAVSGGSTAAMITETIIETDKPKVAPAPARPSGPSKA  
LKLGAKEVDNFVDKLGSEGETIMSSSMGKRTSEATKMHAPPINMESVHMKIEEKITLTCGRDGGLQNMELHGM  
IMLRISDDKYGRIRLHVENEDKKGVLQTHPNVDKKLFTAESLIGLKNPEKSFPVNSDVGVKWLQTTESFIP  
LTINCWPSESGNGCDVNI EYELQEDNLELNDVVITIPLPSGVGAPVIGEIDGEYRHSRRNTLEWCLPVIDAKNK  
SGSLEFSIAGQPNDFFPVQVSFVSKKNYCNIQVTKVTQVDGNSPVRFTETTTFLVDKYEIL

[illegible]

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**FIGURE 2357**

MVLADLGRKITSALRSLSNATIINEEVLNAMLKEVCTALLEADVNIKLVKQLRENVKSAIDLEEMASGLNKRKMI  
QHAVFKELVKLVDPGVKAWTPKKGQNVIMFVGLQGSGKTTTCSKLAYYYQRKGWKTCLICADTFRAGAFDQLKQ  
NATKARIPFYGSYTEM DPVIIASEGVEKFKNENFEIIIVDTSGRHKQEDSLFEEMLQVANAIQPDNIVYVMDASI  
GQACEAQAKAFKDKVDVASVIVTKLDGHAKGGGALSAVAATKSPIIFIGTGEHIDDFEFKTPPFISKLLGMGDI  
EGLIDKVNELKLDDNEALIEKLKHGQFTLRDMYEQFQNMKMGPFSQLGMIPGFGTDFMSKGNEQESMARLKKL  
MTIMDSMNDQELDSTDGAKVFSKQPGRIQRVARGSGVSTRDVQELLTQYTKFAQMVKKMGGIKGLFKGGDMSKNV  
SQSQMAKLNQQMAKMMDPRLHMHMGGMAGLQSMRQFQQGAAGNMKGMMGFNNM

CTCAGACTGTCCTTCTCTCTGACTGTGAAGAATATGCTTCCAGGGCCAGTGTCTGCTGCGATCGAGTCCCACCT  
TCCAAGTCCTGGCATCTCAATGCATCTGGAAGCTACCTGCATTAAAGTCAGGACTGAGCACACAGGTGAACCTCA  
GAAAGAAGAAGCTATGGCCGCAGTGATTCTGGAGAGCATCTTTCTGAAGCGATCCCAACAGAAAAAGAAAACATC  
ACCTCTAAACTTCAAGAAGCGCCTGTTTCTCTTGACCGTGCACAACTCTCCTACTATGAGTATGACTTTGAACG  
TGGGAGAAGAGGCAGTAAGAAGGGTTCAATAGATGTTGAGAAGTCACTTGTGTTGAAACAGTGGTTCTCTGAAAA  
AAATCCTCCTCCAGAAAAGACAGATTCCGAGAAGAGGTGAAGAGTCCAGTGAAATGGAGCAAATTTCAATCATTGA  
AAGGTTCCCTTATCCCTTCCAGGTTGTATATGATGAAGGGCCTCTCTACGTCTTCTCCCAACTGAAGAACTAAG  
GAAGCGGTGGATTACCAGCTCAAAAACGTAATCCGGTACAACAGTGATCTGGTTTCAGAAATATCACCTTGCTT  
CTGGATCGATGGGCAGTATCTCTGCTGCTCTCAGACAGCCAAAAATGCTATGGGCTGCCAAATTTTGAGAACAG  
GAATGGAAGCTTAAACCTGGGAGTTCTCACCGGAAGACAAAAAGCCTTCTCCCCAACGCGCTGAGGAGGACCA  
GATCTTGAAAAAGCCACTACCGCTGAGCCAGCAGCAGCACCAGTCTCCACAAGTGAGTGAAAAAGGTTGTGGC  
CCTTTATGATTACATGCCAATGAATGCAATGATCTACAGCTGCGGAAGGGTGATGAATATTTTATCTTGAGGA  
AAGCAACTTACCATGGTGGAGAGCACGAGATAAAAATGGGCAGGAAGGCTACATTCTAGTAACATATGCTACTGA  
AGCAGAAGACTCCATAGAAATGTATGAGTGGTATTCCAAACACATGACTCGGAGTCAGGCTGAGCAACTGCATAA  
GCAAGAGGGGAAAGAAGGAGGTTTCATTGTCAGAGACTCCAGCAAAGCTGGCAAATATACAGTGTCTGTGTTTGC  
TAAATCCACAGGGGACCCTCAAGGGGTGATACGTCATTATGTTGTGTGTTCCACACCTCAGAGCCAGTATTACCT  
GGCTGAGAAGCACCTTTTCAGCACCATCCCTGAGCTCATTAACTACCATCAGCACAACTCTGCAGGACTCATATC  
CAGGCTCAAATATCCAGTGTCTCAACAAAAACAAGATGCACCTTCCACTGCAGGCCTGGGATACGGATCATGGGA  
AATTGATCCAAAGGACCTGACCTTCTTGAAGGAGCTGGGGACTGGACAATTTGGGGTAGTGAAGTATGGGAAATG  
GAGAGGCCAGTACGACGTGCCATCAAGATGATCAAAGAAGGCTCCATGTCTGAAGATGAATTCATTGAAGAAGC  
CAAAGTCATGATGAATCTTTCCCATGAGAAGCTGGTGCAGTTGTATGGCGTCTGCACCAAGCAGCGCCCCATCTT  
CATCATCACTGAGTACATGGCCAATGGCTGCCTCTGAACCTACCTGAGGGAGATGCGCCACCGCTTCCAGACTCA  
GCAGCTGCTAGAGATGTGCAAGGATGTCTGTGAAGCCATGGAATACCTGGAGTCAAAGCAGTTCCTTCACCGAGA  
CCTGGCAGCTCGAAACTGTTTGGTAAACGATCAAGGAGTTGTTAAAGTATCTGATTTCGGCCTGTCCAGGTATGT  
CCTGGATGATGAATACACAAGCTCAGTAGGCTCCAAATTTCCAGTCCGGTGGTCCCCACCGGAAGTCTCGATGTA  
TAGCAAGTTCAGCAGCAAATCTGACATTTGGGCTTTTGGGGTTTGTATGTGGGAAATTTACTCCTGGGGAAGAT  
GCCATATGAGAGATTTACTAACAGTGAGACTGCTGAACACATTGCCAAAGGCCTACGCTCTCTACAGGCCCTCATCT  
GGCTTCAGAGAAGGTATATACCATCATGTACAGTTGTTGGCATGAGAAAGCAGATGAGCGTCCCACCTTTCAAAAAT  
TCTTCTGAGCAATATTTAGATGTATGGATGAAGAATCTCGAGCTCGCCAATAAGCTTCTTGTTTCTACTTCTC  
TTCTCCACAAGCCCCAATTTACTTTCTCAGAGGAAATCCCAAGCTTAGGAGCCCTGGAGCCTTTGTGCTCCCAC  
TCAATACAAAAAGCCCCCTCTCATCTACCTGCGGATGCACCTCTTCTTTGATTCCCTGGGATAGTGGCTTCTGAGC  
AAAGGCCAAAAAATTATTGTGCTGAAATTTCCCGAGAGAATTAAGACAGACTGAATTTGCGATGAAAAATATTTT  
TTAGGAGGGAGGATGTAAATAGCCGCACAAAGGGGTCCAAACAGCTCTTTGAGTAGGCATTTGGTAGAGCTTGGGG  
GTGTGTGTGTGGGGGTGGACCGAATTTGGCAAGAATGAAATGGTGTCTATAAAGATGGGAGGGGAGGGTGTTTTGA  
TAAAAATAAATTTAGAAAGCTTAAAAAAAAAAAAAAAAAAAA

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**FIGURE 2359**

MAAVILESIFLKRSQQKKKTSPLNFKKRLFLLTVHKLSYYEYDFERGRRGSKKGSIDVEKITCVETVVPEKNPPP  
ERQIPRRGEESSEMEQISIIERFPYPFQVVYDEGPLYVFSPTTEELRKRWIHQLKNVIRYNSDLVQKYHPCFWIDG  
QYLCCSQTAKNAMGCQILENRNGSLKPGSSHRKTKKPLPPTPEEDQILKKPLPPEPAAAPVSTSELKKVVALYDY  
MPMNANDLQLRKGDEYFILEESNLPWWRRARDKNGQEGYIPSNYVTEAEDSIEMYEWYSKHMTRSQAQQLLKQEGK  
EGGFIVRDSSKAGKYTVSVFAKSTGDPQGVIRHYVVCSTPQSQYYLAEKHLFSTIPELINYHQHNSAGLISRLKY  
PVSQQKNAPSTAGLGYGSWEIDPKDLTFLKELGTGQFGVVKYGKWRGQYDVAIKMIKEGSMSEDEFIEEAKVMM  
NLSHEKLVQLYGVCTKQRPFIITEYMANGCLLNYLREMRHRFQTQQLLEMCKDVCEAMEYLESKQFLHRDLAAR  
NCLVNDQGVVKVSDFGLSRYVLDDEYTSSVGSKFPVRWSPPEVLMYSKFSSKSDIWAFGVLMWEIYSLGKMPYER  
FTNSETAEHIAQGLRLYRPHLASEKVYTIMYSCWHEKADERPTFKILLSNILDVMDEES

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**FIGURE 2360A**

GAATTCCTCCTCTGCTCGCTCTGCTCGCAGTCACAGACACTTGAGCACACGCGTACACCCAGACATCTTCGG  
GCTGCTATTGGATTGACTTTGAAGTTCTGTGTGGGTCGCCGTGGCTGCATGTTTGAATCAGGTGGAGAAGCACT  
TCAACGCTGGACGAAGTAAAGATTATTGTTGTTATTTTTTTTTTCTCTCTCTCTCTCTCTTAAGAAAGGAAAATA  
TCCAAGGACTAATCTGATCGGGTCTTCCTTCATCAGGAACGAATGCAGGAATTTGGGAAGTACGATGCAAGT  
GCTGAAGAAGGAGATTTGTTTGGAGGAAACAGGAAAGAGAAAGAAAGGAAGGAAAAATACATAATTTAGGGA  
CGAGAGAGAGAAGAAAAACGGGGACTATGGGGAGAAAAAGATTGAGATTACGAGGATTATGGATGAACGTAACA  
GACAGGTGACATTTACAAAGAGGAAATTTGGGTTGATGAAGAAGGCTTATGAGCTGAGCGTGCTGTGTGACTGTG  
AGATTGCGCTGATCATCTTCAACAGCACCAACAAGCTGTTCCAGTATGCCAGCACCGACATGGACAAAGTGCTTC  
TCAAGTACACGGAGTACAACGAGCCGCATGAGAGCCGGACAACTCAGACATCGTGGAGACGTTGAGAAAGAAGG  
GCCTTAATGGCTGTGACAGCCAGACCCGATGCGGACGATTCCGTAGGTACAGCCCTGAGTCTGAGGACAAGT  
ACAGGAAAATTAACGAAGATATTGATCTAATGATCAGCAGGCAAAGATTGTGTGCTGTTCCACCTCCCAACTTCG  
AGATGCCAGTCTCCATCCAGTGTCCAGCCACAACAGTTTGGTGTACAGCAACCCTGTCAGCTCACTGGGAAACC  
CCAACCTATTGCCACTGGCTCACCTTCTCTGAGAGGAATAGTATGTCTCTGGTGTAAACACATCGACCTCCAA  
GTGCAGGTAACACAGGTGGTCTGATGGGTGGAGACCTCACGTCTGGTGCAGGCACCAGTGCAGGGAACGGGTATG  
GCAATCCCCGAAACTCACCAGGTCTGCTGGTCTCACCTGGTAACCTGAACAAGAATATGCAAGCAAAATCTCCTC  
CCCCAATGAATTTAGGAATGAATAACCGTAAACCAGATCTCCGAGTTCTTATTCCACCAGGCAGCAAGAATACGA  
TGCCATCAGTGTCTGAGGATGTGACCTGCTTTTGAATCAAAGGATAAATAACTCCAGTCGGCTCAGTCATTGG  
CTACCCAGTGGTTTCCGTAGCAACTCTACTTTACCAGGACAAGGAATGGGAGGATATCCATCAGCCATTTCAA  
CAACATATGGTACCGAGTACTCTCTGAGTAGTGCAGACCTGTCATCTCTGCTGGGTTTAAACCCGCCAGCGCTC  
TTCACCTTGGTTTCACTAAGTGGCTGGCAACAGCAACACCTACATAACATGCCACCATCTGCCCTCAGTCAGTTGG  
GAGCTTGCCTAGCACTCATTTATCTCAGAGTTCAAATCTCTCCCTGCCTTCTACTCAAAGCTCAACATCAAGT  
CAGAACCTGTTTCTCTCTAGAGACCGTACCACCACCCCTTCGAGATACCCACAACACACGCGCCACGAGGCGG  
GGAGATCTCTGTTGACAGCTTGGAGAGCTGTAGCAGTTCTGACGCGGAGCGACCGAGAGGATCACCGBAAGC  
AATTCCACTCCCCATTGGACTCACCAGACCTTCGCCGGACGAAAGGGAAGTCCCTCAGTCAAGCGCATGCGAC  
TTTCTGAAGGATGGGCAACATGATCAGATTATTACTTACTAGTTTTTTTTTTTTTTTCTTGCAGTGTGTGTGTGTGC  
TATACCTTAATGGGGAAGGGGGTGCATATGCATTATATGTCCGTGTGTGGAAGGAAAAAGTCAAGTACTCT  
GTTTTGTAAAGTACTTTTAAATTGCCTCAGTGATACAGTATAAGATAAACAGAAATGCTGAGATAAGCTTAGC  
ACTTGAGTTGTACAACAGAACTTGTACAAAATAGATTTTAAAGCTAATCTTTTCACTGTTGTGCTCCTTG  
CAAAATGTATGTTACAATAGATAGTGTGATGTGCAGGTTCAACGTTATTTACATGTAAATAGACAAAAGGAAAC  
ATTTGCCAAAAGCGGCAGATCTTACTGAAAGAGAGAGCAGCTGTTATGCAACATATAGAAAATGTATAGATGC  
TTGGACAGACCCGTAATGGGTGGCCATTGGTAAATGTTAGGAACACACCAGGTACCTGACATCCCAAGAATGC  
TCACAAACCTGCAGGCATATCATTGGCGTATGGCACTCATTAAAAAGGATCAGAGACCATTAAAAAGAGGACCATA  
CCTATTAAAAAAATGTGGAGTTGGAGGGCTAACATATTTAATTAATAAATAAATAAATCTGGGTCTGCATCT  
CTTATTAAATAAAAAATATAAAAAATGTACATTACATTTTGCTTATTTTTCATATAAAAGGTAAGACAGAGTTTGC  
AAAGCATTTGTGGCTTTTGTAGTTTACTTAAGCCAAAATGTGTTTTTCCCTTGATAGCTTCGCTAATATTT  
TAAACAGTCCTGTAAAAAACCAAAAGGACTTTTGTATAGAAAGCACTACCCTAAGCCATGAAGAACTCCATGC  
TTTGCTAACCAAGATAACTGTTTCTCTTTGTAGAAGTTTTGTTTTTGAAATGTGTATTTCTAATTATATAAAAT  
ATTAAGAATCTTTAAAAAAATCTGTGAATTAACATGCTTGTGTATAGCTTTCTAATATATATAATATTATGGT  
AATAGCAGAAGTTTGTATCTTAATAGCGGGAGGGGGTATATTGTGAGTTGCACATTTGAGTAACTATTTT  
CTTCTGTTTTCTTTTACTCTGCTTACATTTTATAAGTTTAAAGGTCAGCTGTCAAAGGATAACCTGTGGGGTTA  
GAACATATCACATTGCAACACCCTAAATTTGTTTTAATACATTAGCAATCTATTGGGTCAACTGACATCCATTGT  
ATATACTAGTTTCTTTCATGCTATTTTATTTTGTGTTTTTGCATTTTATCAAATGCAGGGCCCCCTTCTGATCT  
CACCATTTACCATGCATCTTGGAAATCAGTAAGTGCATATCCTAAGTTCGCCATATTCTAAATCATCTGGTTGG  
TTTTAGCCTAGAAATTTGATACGCTTTTGTAGAAATATGCCAGAAATAGAAAAGCTATGTTGGGGCACATGTCCTG  
CAAAATATGGCCCTAGAAAACAAGTATGGAATTTACTTGGTGAATAAGTTATAAATCCCACAGAAGAAAAATG  
TGAAAGACTGGGTGTAGACAAGAAGGAAGCAGGTAAGGGATAGTTGCTTTGTCATCCGTTTTTAATTATTTTA  
ACTGACCTTGACAATCTTGTGAGCAATATAGGACTGTTGAACAATCCCGGTGTGTGAGGACCCCAATGTAC  
TTCTGCATAAAGCATGTATGTCATCTATTTTTTCTTCAATAAAGAGATTTAATAGCCATTTCAAGAAATCCCAT



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**FIGURE 2360B**

AAGAACCTCTCTATGTCCCTTTTTTAAATTTAAAAAATGACTCTTGTCTAATATTCGTCTATAAGGGATTAATT  
TTCAGACCCTTTAATAAGTGAGTGCCATAAGAAAGTCAATATATATTGTTTAAAAGATATTCAGTCTAGGAAAG  
ATTTTCCTTCTCTTGGAATGTGAAGATCTGTCGATTTCATCTCCAATCATATGCATTGACATACACAGCAAAGAAG  
ATATAGGCAGTAATATCAACACTGCTATATCATGTGTAGGACATTTCTTATCCATTTTTTCTCTTTTACTTGCAI  
AGTTGCTATGTGTTTCTCATGTAAAAGGCTGCCGCTGGGTGGCAGAAGCCAAGAGACCTTATTAAGTGGCTAT  
ATTTTCTTAACTTGATCTGAAATCCACAATTAGACCACAATGCACCTTTGGTTGTATCCATAAAGGATGCTAGC  
CTGCCTTGACTAATGTTTTATATATT

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**FIGURE 2361**

MGRKKIQITRIMDERNRQVTFTRKRFGLMKKAYELSVLCDCEIALIIFNSTNKLFOYASTDMDKVLLKYTEYNEP  
HESRTNSDIVETLRKKGLNGCDSPDPDADDSVGHSPESSEDKYRKINEDIDLMISRQRLCAVPPPNFEMPVSIPVS  
SHNSLVYSNPVSSLGNPNLLPLAHPQLQRNSMSPGVTHRPPSAGNTGGLMGGDLTSGAGTSAGNGYGNPRNSPGL  
LVSPGNLKNMQAKSPPPMNLGMNNRKPDRLVLIIPGSKNTMPVSEDVDLLNQRINNSQSAQSLATPVVSVAT  
PTLPGQGMGGYPSAISTTYGTEYSLSSADLSSLSGFNTASALHLGSVTGWQQQHLHNMPPSALSQLGACTSTHLS  
QSSNLSLPSTQSLNIKSEPVSPPRDRTTTTSPRYPQHTREAGRSPVDSLSSCSSSYDGSREDHRNEFHSPIGLT  
RPSDERESPSVKRMRLSEGWAT

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**FIGURE 2362**

CCACCATGCTCGCCCTGGAGGCTGCACAGCTCGACGGGCCACACTTCAGCTGTCTGTACCCAGATGGCGTCTTCT  
ATGACCTGGACAGCTGCAAGCATTCCAGCTACCCTGATTAGAGGGGGCTCCTGACTCCCTGTGGGACTGGACTG  
TGGCCCCACCTGTCCCAGCCACCCCTATGAAGCCTTCGACCCGGCAGCAGCCGCTTTTAGCCACCCCCAGGCTG  
CCCAGCTCTGCTACGAACCCCCACCTACAGCCCTGCAGGGAACCTCGAACTGGCCCCCAGCCTGGAGGCCCCGG  
GGCCTGGCCTCCCCGCATACCCACGGAGAACTTCGCTAGCCAGACCCTGGTTCCCCCGGCATATGCCCGTACC  
CCAGCCCTGTGCTATCAGAGGAGGAAGACTTACCGTTGGACAGCCCTGCCCTGGAGGTCTCGGACAGCGAGTCGG  
ATGAGGCCCTCGTGGCTGGCCCCGAGGGGAAGGGATCCGAGGGACTCGCAAGAAGCTGCGCCTGTACCAGTTCCT  
GCTGGGGCTACTGACCGCGCGGGGACATGCGTGAGTGCGTGTGGTGGGTGGAGCCAGGCGCCGGCGTCTTCCAGTT  
CTCCTCCAAGCACAAGGAACCTCTGGCGCGCCGCTGGGGCCAGCAGAAGGGGAACCGCAAGCGCATGACCTACCA  
GAAGCTGGCGCGCGCCCTCCGAACTACGCCAAGACCGGCGAGATCCGCAAGGTCAAGCGCAAGCTCACCTACCA  
GTCGACAGCGCGCTGCTGCCCTGCAGTCCGCCGGGCTGAGCACACCCGAGGCTCCACCTGCGGAGCCGCTGGG  
GGACCTCACGTCCCAGCCAGGATCCCCCTGGAAGAAAAAGGGCGTCCCCACACTCTAGGTGATAGGACTTACGCA  
TCCCCACCTTTTGGGGTAAGGGGAGTGCTGCCCTGCCATAATCCCCAAGCCAGCCCGGGCCTGTCTGGGATTCC  
CCACTTGTGCTGGGGTCCCTCTGGGATTCTTTGTGATGTACAGACTCCCTGGGATCCTCATGTTTGGGTGAC  
AGGACCTATGGACCACTATACTCGGGGAGGCAGGGTAGCAGTGCTTCCAGAGTCCCAAGAGCTTCTCTGGGATTT  
TCTTGTGATATCTGATTCCCCAGTGAGGCCTGGGACCTTTTTAAGATCGCTGTGTGTCTGTAAACCCCTGAATCTC  
ATCTGGGGTGGGGGCCCTGCTGGCAACCCTGAGCCCTGTCCAAGGTTCCCTCTTGTGAGATCTGAGATTTCTAG  
TTATGTCTGGGGCCCTCTGGGAGCTGTTATCATCTCAGATCTCTTCGCCCATCTATGGCTGTGTTGTCACATCTG  
TCCCCTCATTTTTGAGATECCCCAATTCTCTGGAATATTCTGCTGCCCTTTTTATGTGTCTGGAGTCCCCAA  
TCACATCTAGGGCTCCTCC

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**FIGURE 2363**

MLALEAAQLDGPHFSCLYPDGVFYDLDSCKHSSYPDSEGAPDSLWDWTVAPPVPATPYEAFDPAAAAF SHPQAAQ  
LCYEPPTYSPAGNLELAPSLEAPGPGLPAYPTENFASQTLVPPAYAPYPSVLSSEEDLPLDSPALEVSDSESE  
ALVAGPEGKGSEGLARSCACTSSCWGY

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**FIGURE 2364**

AGCTTTCTGGGGCAGGCCAGGCCTGACCTTGGCTTTGGGGCAGGGAGGGGGCTAAGGTGAGGCAGGTGGCGCCAG  
CAGGTGCACACCCAATGCCCATGAGCCCAGACACTGGACGCTGAACCTCGCGGACAGTTAAGAACCCAGGGGCCCT  
CTGCGCCTGGGCCCAGCTCTGTCCACACCGCGGTACATGGCACCACCTCTCTTGACAGCTCCACCAAGGGCCC  
ATCGGTCTTCCCCCTGGCACCTTCCTCCAAGAGCACCTCTGGGGGCACAGCGGCCCTGGGCTGCCTGGTCAAGGA  
CTACTTCCCCGAACCGGTGACGGTGTCTGTGGAACCTCAGGCGCCCTGACCAGCGGCGTGCACACCTTCCCGGTGT  
CCTACAGTCTCAGGACTCTACTCCCTCAGCAGCGTGGTGACCGTGCCCTCCAGCAGCTTGGGCACCCAGACCTA  
CATCTGCAACGTGAATCACAAGCCCAGCAACACCAAGGTGGACAAGAAAGTTGGTGAGAGGCCAGCACAGGGAGG  
GAGGGTGTCTGCTGGAAGCAGGCTCAGCGCTCCTGCCTGGACGCATCCCGGTATGCAGCCCCAGTCCAGGGCAG  
CAAGGCAGGCCCCGTCTGCCTCTTCAACCGGAGCCTCTGCCCGCCCCACTCATGCTCAGGGAGAGGGTCTTCTGG  
CTTTTCCAGGCTCTGGGCAGGCACAGGCTAGGTGCCCCCTAACCCAGGCCCTGCACACAAAGGGGCAGGTGCTG  
GGCTCAGACCTGCCAAGAGCCATATCCGGGAGGACCTGCCCCCTGACCTAAGCCCACCCCAAAGGCCAAACTCTC  
CACTCCCTCAGCTCGGACACCTTCTCTCTCCAGATTCCAGTAACTCCCAATCTTCTCTCTGCAGAGCCCAAT  
CTTGTGACAAACTCACACATGCCACCGTGCCAGGTAAAGCCAGCCCAGGCCTCGCCCTCCAGCTCAAGGCGGG  
ACAGGTGCCCTAGAGTAGCCTGCATCCAGGGACAGGCCCCAGCCGGGTGCTGACACGTCCACCTCCATCTCTTCC  
TCAGCACCTGAACTCCTGGGGGACCGTCAGTCTTCTCTTCCCCCAGAACCCAAAGGACACCTCATGATCTCC  
CGGACCCCTGAGGTACATGCGTGGTGGTGGACGTGAGCCACGAAGACCCTGAGGTCAAGTTCAACTGGTACGTG  
GACGGCGTGAGGTGCATAATGCCAAGACAAAGCCGCGGGAGGAGCAGTACAACAGCACGTACCGGTGGTCAGC  
GTCTCACCCTCCTGCACCAGGACTGGCTGAATGGCAAGGAGTACAAGTGCAAGGTCTCCAACAAAGCCCTCCCA  
GCCCCATCGAGAAAACCATCTCCAAGCCAAAGGTGGGACCCGTGGGGTGCGAGGGCCACATGGACAGAGGCCG  
GCTCGGCCACCTCTGCCCTGAGAGTGACCGCTGTACCAACCTCTGTCTACAGGGCAGCCCCGAGAACCACAG  
GTGTACACCCTGCCCCCATCCCGGGATGAGCTGACCAAGAACCAGGTGAGCCTGACCTGCCTGGTCAAAGGCTTC  
TATCCAGCGACATCGCCGTGGAGTGGGAGAGCAATGGGCAGCCGAGAACAACTACAAGACCACGCCTCCCGTG  
CTGGACTCCGACGGCTCCTTCTTCTCTACAGCAAGCTACCGTGGACAAGAGCAGGTGGCAGCAGGGGAACGTC  
TTCTCATGCTCCGTGATGCATGAGGCTCTGCACAACCACTACACGCAGAAGAGCCTCTCCCTGTCTCCGGGTAAA  
**TGAGT**GGCAGCGCCGGCAAGCCCCGCTCCCCGGGCTCTCGCGGTGCGACAGGATGCTTGGCACGTACCCCTGT  
ACATACTTCCCGGGCGCCAGCATGGAATAAAGCACCCAGCGCTGCCCTGGGCCCTGCGAGACTGTGATGGTT  
CTTTCACGGGTGAGGCCGAGTCTGAGGCCTGAGTGGCATGAGGGAGGCAGAGCGGGTC

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**FIGURE 2365**

STKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSL  
GTQTYICNVNHKPSNTKVDKKVEPKSCDKTHCTPPCPAPPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSH  
EDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQP  
REPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPVLDSDGSFFLYSKLTVDKSRWQ  
QGNVFSCSVMHEALHNHYTQKSLSLSPGK

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**FIGURE 2366**

GCCCGCGCCGCGCGCTCTTTCTCCGACAGCTGCCGGGGTGCCCTGCAAGCTGTTCCGCGCGTCTGCCCGTCT  
GTCCCGCGGGTTCGTCGCCCCGACAGCCGCGCCATGACCACCCAGCAGATAGACCTCCAGGGCCCCGGGGCCGTG  
GGGCTTCCGCCTCGTGGGCGCAAGGACTTCGAGCAGCCTCTCGCCATTTCCCGGGTCACTCCTGGAAGCAAGGC  
GGCTCTAGCTAATTTATGTATTGGAGATGTAATCACAGCCATTGATGGGGAAAATACTAGCAATATGACACACTT  
GGAAGCTCAGAACAGAATCAAAGGCTGCACAGACAACCTTGACTCTCACTGTAGCCAGATCTGAACATAAAGTCTG  
GTCTCCTCTGGTGACGGAGGAAGGGAAGCGTCATCCATACAAGATGAATTTAGCCTCTGAACCCCAGGAGGTCTT  
GCACATAGGAAGCGCCCAACAACCGAAGTGCCATGCCCTTTACCGCCTCGCCTGCCCTCCAGCACTACTGCCAGGGT  
CATCACAACCCAGTACAACAACCCAGCTGGCCTCTACTCTTCTGAAAATATCTCCAACCTTCAACAATGCCCTGGA  
GTCAAAGACTGCTGCCAGCGGGTGGAGGCGAACAGCAGACCCTTAGACCATGCTCAGCCTCCAAGCAGCCTTGT  
CATCGACAAAGAATCTGAAGTTTACAAGATGCTTCAGGAGAAACAGGAGTTGAATGAGCCCCGAAACAGTCCAC  
GTCTTTCTTGGTTTTCAGGAAATCCTGGAGTCTGAAGAAAAGGGGATCCCAACAAGCCCTCAGGATTCAGAAG  
TGTTAAAGCTCCTGTCTACTAAAGTGGCTGCGTCGATTGGAAATGCTCAGAAGTTGCCTATGTGTGACAAATGTGG  
CACTGGGATTGTTGGTGTGTTGTGAAGCTGCGGGACCGTCACCGCCACCCTGAGTGTTATGTGTGCACTGACTG  
TGGCACCAACCTGAAACAGAAGGGCCATTTCTTTGTGGAGGATCAAATCTACTGTGAGAAGCATGCCCCGGGAGCG  
AGTCACACCACCTGAGGGTTATGAAGTGGTCACTGTGTTCCCCAAGTTCAGCCAGCAGATCTGACCACTGTTCTCC  
AGCAGGCCTCTGCTGCAGCTTTTTCTCTCAGTGTTCTGGCCCTCTCCTCTCTTGAAAGTTCTCTGCTTACTTTGG  
TTTTCCCTCTGCTTGTAACATTGAGTCCCCTCCCTGCCTTGGTTAATTGACTCACACCAGCTGTGCGATGCCC  
GCTTTTACAATTAAAGGAAAAGTGTGTTTGTTCAGTGTACCTTGTGAGCAACACTGTGTCCCTTCGCCCCACCGT  
TCCTCTCTGCTGCATTTGGACATCAGCCAAATTTGAACCAATCAAATATAACGTGTCTGACACTGATTTGTTT  
TTACTCAATAAATGTATAGACTACAAAAAAAAAAAAA

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**FIGURE 2367**

MTTQQIDLQGPWPWFRLVGGKDFEQPLAISRVTPGSKAALANLCIGDVITAIDGENTSNMTHLEAQNRIKGCTD  
NLTLTVARSEHKVWSPLVTEEGKRHPYKMNLASEPQEV LHIGSAHNRSAMPFTASPASSTTARVITNQYNNPAGL  
YSSENISNFNNALESKTAASGVEANSRPLDHAQPPSSLVIDKESEVYKMLQEKQELNEPPKQSTSFVLVQEILES  
EEKGDPNKP SGFRSVKAPVTKVAASIGNAQKLPMCDKCGTGIVGVFVKLRDRHRHPECYVCTDCGTNLKQKGHFF  
VEDQIYCEKHARERTPPEGYEVVTVFPK



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**FIGURE 2368**

[illegible]

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**FIGURE 2369**

MVEAIVEFDYQAQHDELTIISVGEIITNIRKEDGGWEGQINGRRGLFPDNFVREIKKEMKKDPLTNKAPEKPLH  
EVPSGNSLLSSETILRTNKRGERRRRRRCQVAFSYLPQNDDELELKVGDIIEVVGEVEEGWEGVLNGKTGMFPSN  
FIKELSGESDELGISQDEQLSKSSLRETTGSESDGGSSSTKSEGANGTVATAAIQPKKVKGVGFGDIFKDKPIK  
LRPRSIEVENDFLPVEKTIGKKLPATTATPDSSKTEMDSRTKSKDYCKVIFPYEAQNDELTIKEGDIVTLINKD  
CIDVGWWEGLNGRRGVFPDNFVKLLPPDFEKEGNRPKKPPPPSAPVIKQAGTTERKHEIKKIPPERPEMLPNR  
TEEKERPEREPKLDLQKPSVPAIPPKKPRPPKTNLSRPGALPPRRPERPVGPLTHTRGDSPKIDLAGSSLSGIL  
DKDLSDRSNDIDLEGFDSVVSSTEKLSHPTTSRPKATGRRPPSQSLTSSSLSSPDIFDSPSPEEDKEEHISLAHR  
GVDASKKTSKTVTISQVSDNKASLPPKPGTMAAGGGGPAPLSSAAPSPSSSLGTAGHRANSPSLFGTEGKPKME  
PAASSQAAVEELRTQVRELRSI IETMKDQOKREIKQLSELDEEKKIRLRLQMEVNDIKKALQSK

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**FIGURE 2370**

CCCGCTTCTGGAGTGTTATCGTCACCAATGTCCCTAATGGTCTCGGCTGGCCGGGGCCTGGGGGCCGTGTGGTCCC  
CAACCCACGTGCAGGTGACGGTGCTGCAGGCGCGGGCCTGCGGGCCAAGGGCCCCGGGGGCACGAGCGACGCGT  
ACGCGGTGATCCAGGTGGGCAAGGAGAAGTACGCCACCTCCGTGTCGGAGCGCAGCCTGGGCGCGCCCGTGTGGC  
GCGAGGAGGCCACCTTCGAGCTGCCATCGCTGTGTCTCCGGACCCGCGGCCGCCACCCTGCAGCTCACCG  
TGCTGCACCGCGCGCTGCTCGGCCTCGACAAGTTCCTGGGCCGCGCCGAGGTGGACCTGCGGGATCTGCACCGCG  
ACCAGGGCCGCAAGAGACGCAGTGGTATAAGTTGAAATCCAAACCAGGAAAGAAGGACAAGGAGCGAGGAGAAA  
TTGAGGTTGACATCCAGTTTATGAGAAACAACATGACTGCCAGCATGTTTGACCTTTCTATGAAAGACAAGTCTC  
GGAATCCATTTGGAAAGCTGAAGGACAAGATCAAGGGGAAGAATAAGGACAGTGGGTGAGACACCGCCTCCGCCA  
TCATCCCTAGCACGACACCTTCGGTCGACAGTGATGATGAGTCTGTGGTTAAAGACAAGAAAAAGAAATCAAAGA  
TCAAGACCTTACTTTCCAAGTCAAATTTGCAGAAGACGCCTCTTTCCAGTCCATGTCTGTCTGCGGACTTCAA  
AGCCAGAAAAAGTCTGCTTCGTCCCGGAGACTTTTTCAGTCCCAGTGGGATGAAGATGACAATGAGGATGAGTCTT  
CCTCGGCCTCGGATGTCATGTCTCACAAGAGAACAGCGAGTACGGATCTTAAGCAACTGAACCAGGTCAACTTTA  
CCCTTCCCAAGAAGGAAGGACTTTCTTTCTTGGTGGCCTTCGGTCTAAGAATGATGTCTTTCCGCTCTAATG  
TCTGCATCAATGGGAACCATGTTTACCTGGAGCAGCCCCAACCCACCGGTGAGATCAAGGATAGCAGCCCGTCTT  
CCTCCCCATCCCCAAGGGTTTCAGAAAGAAAACATTGTTCTTCTTACAGAGAACCTGGCGGCTGGGTCTTGGA  
AGGAGCCTGCTGAAGGAGGTGGGCTGTCTACTGACAGGGATGTCTCCGAATCTTCCACCAAGGACTCCTTGAAGT  
CTATGACCTTGCCGACCTACCGACCTGCCCCACTGATCAGTGGGGACCTCAGGGAAAAATGGCCCCGCAACT  
CAGAGGCCACAAAAGAAGCTAAGGAGAGCAAGAAGCCAGAGAGCAGGAGGTCTCTTTGCTGTCTCTGATGACGG  
GGAAGAAGGATGTGGCTAAGGGCAGTGAAGGTGAAAACCTTCTCACGGTCCCAGGGAGGGAGAAGGAAGGCATGC  
TGATGGGGTTAAGCCGGGGAGGACGCATCGGGGCTGCTGAAGACCTTGTGAGAAGATCTGAGAAAGATACTG  
CAGCTGTTGTCTCCAGACAGGGCAGCTCCCTGAACCTCTTTGAAGATGTGCAGATCACAGAACCAGAAGCTGAGC  
CAGAGTCCAAGTCTGAACCGAGACCTCCAATTTCTCTCCGAGGGCTCCCCAGACCAGAGCTGTCAAGCCCCGAC  
TTTATCTGTGAAGCCAATGAATGCCACGGCCACCAAGGTTGCTAACTGCAGCTTGGAAGTGGCACCATCATCA  
GTGAGAACTTGAACAATGAGGTGATGATGAAGAAATACAGCCCTCGGACCCTGCATTTGCATATGCGCAGCTGA  
CCCACGATGAGCTGATTGAGCTGGTCTCAAACAGAAGGAAACGATAAGCAAGAAGGAGTTCCAGGTCCGCGAGC  
TGGAAGACTACATTGACAACCTGCTTGTGAGGGTTCATGGAAGAAACCCCAATATCCTCCGCATCCCGACTCAGG  
TTGGCAAAAAAGCAGGAAAGATGTAATCAGCAGAAAAAAACACCGAGACGTTTCTGTGACTTCACTTTACCT  
GCTCCAGGGGTCAAGGACTTGCTTGCCTGATAACCAGCCAGCAGGCTCCGAATCACCATCTCCCTCACATGTTA  
TCCGGCAAGAGT

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**FIGURE 2371**

MSLMVSAGRGLGAVWSPTHVQVTVLQARGLRAKGPGGTSDAYAVIQVGKEYATSVSERSLGAPVWREEATFELP  
SLLSSGPAAAATLQLTVLHRALLGLDKFLGRAEVDLRDLHRDQGRRTQWYKLKSKPGKKDKERGEIEVDIQFMR  
NNMTASMFDL SMKDKSRNPF GKLDKIKGKNKDSGSDTASAIIPSTTPSVDSDES VVKDKKKKSKIKTLLSKSN  
LQKTPLSQSMSVLPTSKPEKVLLRPGDFQSQWDEDDNEDESSASDVMSHKRTASTDLKQLNQVNFTLPKKEGLS  
FLGGLRSKNDVLSRSNVCINGNHVYLEQPQPTGEIKDSSPSSSPSPKGFRKKTLSSTENLAAGSWKEPAEGGGL  
STDRDVSESSTKDSLKSMTLPTYRPAPLISGDLREKMAPANSEATKEAKESKKPESRRSSLLSLMTGKKDVAKGS  
EGENLLTVPGREKEGMLMGVKPGEDASGPAEDLVRSEKDTAAVVS RQGSSLNLFEDVQITEPEAEPESEKSEPRP  
PISSPRAPQTRAVKPRLHPVKPMNATATKVANCSLGTATIISENLNNEVMMKKYSPSDPAFAYAQLTHDELIQLV  
LKQKETISKKEFQVRELEDYIDNLLVRVMEETPNILRIPTQVGKKAGKM

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**FIGURE 2372**

AGCTGGGGCGCGGCCCGCCTGTCTGCACAGACAGCACCATGTCGCTCATGGTCGTCAGCATGGTGTGTGTTGGGTT  
CTTCTTGCTGCAGGGGGCCTGGCCACATGAGGGAGTCCACAGAAAACCTTCCCTCCTGGCCCCACCCAGGTCCCCT  
GGTGAATCAGAAGAGACAGTCATCCTGCAATGTTGGTCAGATGTCAGGTTTCAGCACTTCCTTCTGCACAGAGA  
AGGGAAGTTTAAGGACACTTTCACCTCATTGGAGAGCACCATGATGGGGTCTCCAAGGCCAACTTCTCCATCGG  
TCCCATGATGCAAGACCTTGCAGGGACCTACAGATGCTACGGTTCTGTTACTCACTCCCCCTATCAGTTGTCAGC  
TCCCAGTGACCCTCTGGACATCGTCATCACAGGTCTATATGAGAAAACCTTCTCTCTCAGCCCAGCCGGGCCCCAC  
GGTCTGGCAGGAGAGAGCGTGACCTTGTCTGCAGCTCCCGGAGCTCCTATGACATGTACCATCTATCCAGGGA  
GGGGGAGGCCCCATGAACGTAGGTTCTCTGCAGGGCCCAAGGTCAACGGAACATTCCAGGCCGACTTCTCTCTGGG  
CCCTGCCACCCACGAGGAACCTACAGATGCTTCGGCTCTTTCCGTGACTCTCCATACGAGTGGTCAAACCTCGAG  
TGACCCACTGCTTGTCTGTCTCACAGGAAACCCCTCAAATAGTTGGCCTTCACCCACTGAACCAAGCTCCGAAAC  
CGGTAACCCACAGACACCTGCATGTTCTGATTGGGACCTCAGTGGTCATCATCCTCTTCATCCTCTCTCTCTTCTT  
TCTCCTTCATCGCTGGTGCTGCAACAAAAAATGCTGTTGTAATGGACCAAGAGCCTGCAGGGAACAGAACAGT  
GAACAGGGGAGGACTCTGATGAACAAGACCCCTCAGGAGGTGACATATGCACAGTTGAATCACTGCGTTTTACACA  
GAGAAAAATCACTCGCCCTTCTCAGAGGCCCAAGACCCCCAACAGATATCATCGTGACACGGAACCTTCCAAA  
TGCTGAGCCCTTGATCCAAAAGTTGTCTCCTGCCCATGAGCACCACAGTCAGGCCTTGAGGGGATCTTCTAGGGAGA  
CAACAGCCCTGTCTCAAACCTGGGTTGCCAGCTCCAATGTACCAGCAGCTGGAATCTGAAGGCGTGAGTCTGCAT  
CTTAGGGCATCGCTCTTCTCACCACAAATCTGAACGTGCCTCTCCCTTGCTTACAAATGTCTAAGGTCCCCA  
CTGCCTGCTGGAGAGAAAAACACTCCTTTGCTTAGCCCACAATTCTCCATTTCACTTGACCCCTGCCACCTCT  
CCAACCTAACTGGCTTACTTCTAGTCTACTTGAGGCTGCAATCACACTGAGGAACACAAATCCAAACATACA  
AGAGGCTCCCTCTTAACACGGCACTTAGACACGTGCTGTTCCACCTTCCCTCATGCTGTTCCACCTCCCCCAGA  
CTAGCTTTCAGCCTTCTGTCAGCAGTAAACCTATATATTTTTTAAATAATTTCAATGTAGTTTTCCCTCCTTC  
AAATAACATGTCTGCCCTCA

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**FIGURE 2373**

MSLMVSMVCVGFFLLQGAWPHEGVHRKPSLLAHPGPIVKSEETVILQCWSDVRFQHFLHREGKFKDTLHLIGE  
HHDGVSKANFSIGPMMQDLAGTYRCYGSVTHSPYQLSAPSDPLDIVITGLYEKPSLSAQPGPTVLAGESVTLSCS  
SRSSYDMYHLSREGEAHERRFSAGPKVNGTFQADFPLGPATHGGTYRCFGSFRDSPYEWSNSSDPLLVSVTGNPS  
NSWSPTEPSSETGNPRHLHVLIGTSVVIILFILLFFLLHRWCCNKKNAVVMQEPAGNRTVNREDSDEQDPQE  
VTYAQLNHCVFTQRKITRPSQRPKTPPTDIIVYTELPNAEP

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**FIGURE 2374**

GGTGACCAAGAGTACATCTCTTTTCAAATAGCTGGATTAGGTCCTCATGCTGCTGTGGTCATTGCTGGTCATCTT  
TGATGCAGTCACTGAACAGGCAGATTTCGCTGACCCCTTGTTGGCGCCCTCTTCTGTCTTCGAAGGAGACAGCATCGT  
TCTGAAATGCCAGGGAGAACAGAACTGGAAAATTCAGAAGATGGCTTACCATAAGGATAACAAAGAGTTATCTGT  
TTTCAAAAAATTTCTCAGATTTCCTTATCCAAAGTGCAGTTTTAAGTGACAGTGGTAACATTTTCTGTAGTACCAA  
AGGACAACCTCTTTCTCTGGGATAAAACCTTCAAATATAGTAAAGATAAAAGTCCAAGAGCTCTTTCAACGTCCTGT  
GCTGACTGCCAGCTCCTTCCAGCCCATCGAAGGGGGTCCAGTGAGCCTGAAATGTGAGACCCGGCTCTCTCCACA  
GAGGTTGGATGTTCAACTCCAGTTCTGCTTCTTCAGAGAAAACCAGGTCCTGGGGTCAGGCTGGAGCAGCTCTCC  
GGAGCTCCAGATTTCTGCCGTGTGGAGTGAAGACACAGGGTCTTACTGGTGCAAGGCAGAAACGGTGACTCACAG  
GATCAGAAAACAGAGCCTCCAATCCCAGATTACGTCAGAGAAATCCCCATCTCTAATGTAAGCTTGGAGATCCG  
GGCCCCGGGGGACAGGTGACTGAAGGACAAAACTGATCCTGCTCTGCTCAGTGGCTGGGGGTACAGGAAATGT  
CACATTCTCCTGGTACAGAGAGGCCACAGGAACAGTATGGGAAAGAAAACCCAGCGTTCCCTGTCAGCAGAGCT  
GGAGATCCCAGCTGTGAAAGAGAGTGTATGCCGGCAAATATTACTGTAGAGCTGACAACGGCCATGTGCCTATCCA  
GAGCAAGGTGGTGAATATCCCTGTGAGAATTCAGTGTCTCGCCCTGTCTCACCCTCAGGTCTCTGGGGCCCCA  
GGCTGCAGTGGGGGACCTGCTGGAGCTTCACTGTGAGGCCCTGAGAGGCTCTCCCCCAATCTTGTACCAATTTTA  
TCATGAGGATGTACCCCTTGGGAACAGCTCGGGCCCCCTGAGGAGGGGGCTCTTCAACCTCTCTTTGACTGC  
AGAACATTCTGGAACTACTCCTGTGAGGCCAACACGGCCTGGGGGGCCAGTGCAGTGAGGCAGTGCCAGTCTC  
CATCTCAGGACCTGATGGCTATAGAAGAGACCTCATGACAGCTGGAGTTCTCTGGGGACTGTTTGGTGTCTTGG  
TTTCACTGGTGTGCTTTGCTGTGTATGCCTTGTTCACAAGATATCAGGAGAAAGTTCTGCCACTAATGAACC  
CAGAGGGGGCTTCCAGGCCAAATCTCAAGAGTTACCTATTCAAGCCCAACCCAGACATGGAGGAGCTGCAGCC  
AGTGTATGTCAATGTGGGCTCTGTAGATGTGGATGTGGTTTATTCTCAGGTCTGGAGCATGCAGCAGCCAGAAAG  
CTCAGCAAACATCAGGACACTTCTGGAGAACAAGGACTCCCAAGTCATCTACTCTTCTGTGAAGAAATCATAACA  
CTTGGAGGAATCAGAAGGGAAGATCAACAGCAAGGATGGGGCATCATTAAAGACTTGCTATAAAACCTTATGAAAA  
TGCTTGAGGCTTATCACCTGCCACAGCCAGAACGTGCCTCAGGAGGCACCTCCTGTCAATTTTGTCTCTGATGATG  
TTTCTTCTCCAATATCTTCTTTTACCTATCAATATTCATTGAAGTGTGCTACATCCAGACACTGTGCAAAATAAA  
TTATTTCTGCTACCTTCTCTTAAGCAATCAGTGTGTAAAGATTTGAGGGAAGAATGAATAAGAGATACAAGGTCT  
CACCTTCACTACTGTGAAGTGATGAGAACAGGACTTGATAGTGGTGTATTAACCTATTATGTGCTGCTGGATA  
CAGTTTGCTAATATTTTGTGAGAATTTTGC AAATATGTTCAATTGGGAATATTGGCCTGAAATTTTCTTTTCCA  
CTGTGCTCTGCCAGAAATGTTGTATCAGGCTGATGCTGGCTTCATAGAATGAGTTAGGCAGGAGCCCTTCTCTC  
TTGATTTTTTGGCATAGTTTCAGCAGGATTGGTACCAGTTATTCTTTCTGCACTTGTGTAAGTTTCACTATGAAT  
CCATCTGGTCTAGGGCTTTTGTGTTGGTTGGTAAGTTTTTATTACTAATTCAACTTCAGCGCTTGATATTGGTC  
TAGGAGGGGTTTCTGTCTCTTCTGTTCAATCTTGGGAGATTGTGTGTTTCCAGGAATTTAGCCGTTTCTCTCCA  
GATTTTCTTCTTTATGTGCATCGACTTGAGTGTAAACATAACTTATATGCACTGGGAAACCAAAAAATCTGTGTG  
ACTTGCTTTATTGCAGCATTGTTTTTATTTGGTAGTCTGGAAGTGAACCTGCAATATCACC AAAGTATGCATAT  
AGTTGCAAAAATGTGATTTTGCATAGTAAATATGAGTATTGCAATAAACTATGATATTACTTTTGTAAAGTAT  
ATAGAATAAAATGTAAATAATCT

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**FIGURE 2375**

MWEWKICNSHGARPFAEPAGWEFVNLLRHHKSFLIAPLCLSVPSRPVLTIRSPGAQAAVGDLELHCEALRGSP  
PILYQFYHEDVTLGNSSAPSGGGASFNLSTAEHSGNYSCEANGLGAQCSEAVPVSISGGWVLPGYRV



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**FIGURE 2376A**

ACTTGGCAAATCCGAAGATTTTCCGGGATCTTTCAAAGCCCATGGGGGCTCAGACCAAGGAAAGGAAGCTGAAAT  
TTATCCAGAGGTTTAAAGAAGTTGAGAAAAGTGAAGGAGACATGACTGTCCAGTGCCACTACTACACCCACTACT  
CCTCGGCCATCATCGTGGCCTCCTACCTGGTCCGGATGCCACCCTTACCCAGGCCTTCTGCGCTTTGCAGGGCG  
GAAGCTTCGACGTGGCAGACAGAATGTTCCACAGTGTGAAGAGCACGTGGGAGTCGGCCTCCAGAGAGAATGA  
GTGACGTGACGGGAGCTGACCCAGAGTTCTTCTACCTGCCTGAGTTCTTAACCACTGCAACGGGGTAGAGTTG  
GCTGCATGCAGGACGGGACTGTGCTAGGAGACGTGCAGCTCCCTCCCTGGGCTGATGGGGACCCTCGGAAATTCA  
TCAGCCTGCACAGAAAGGCCCTGGAAAGTGACTTTGTGAGTGCCAACTCCACCATTGGATAGACCTTATTTTG  
GGTACAGCAGCAGGGGCCAGCCGAGTGGATGCTGTTAATATCTTCCACCCTACTTCTACGGTGACAGAATGG  
ACCTCAGCAGCATCACTGACCCCTCATCAAAGCACCATCCTGGGGTTTGTGAGCAACTTTGGACAGGTGCCCA  
AACAGCTCTTTACCAAACCTCACCCAGCCAGGACTGCAGCAGGGAAGCCTCTGCCTGGAAAGGATGTCTCCACCC  
CCGTGAGCCTGCCTGGCCACCCACAGCCCTTTTTCTACAGCCTGCAGTCGCTGAGGCCCTCCAGGTACGGTCA  
AAGGTGATTCCCTGGCCATGCATTGTTTGGTGTCTGTCCAGGGTTGTCCCTTCAGTGGCTGGGTTCTCTGGA  
GGTCCAGCACACATACCTGGGCAAAGTATTGGGGACTGACTTTGAATGGCTGCATCTCCAGTCACAGCCAGATT  
CTAGGGGGGTGTCTCTCTGGAAGTGTCTAGGAGCTCCTCTGTTAGACCCTAACTTCTGAAGACCCACGTCTCT  
CTGTCTTTCTGTCTGTCTCTCTCACACACATACACACAGACACCTCTTTCAGGCACACACACATCTCTCTT  
CCTCTTCTCTCTTTTTATACATGCACACACATGTACAACACATACCTTCTCTCTCAAGAGACCAGTGGAGA  
GTCCCAAGTTTACAAGGAAGGATTACAGCCTCTGTGCTTTGGCCACTGGTCTCTTAAGCAGGGCAGGGGACTA  
AGCTAAGCACTCTAAGCAGGCAGCCAGTAGCTAAGAACATGTGCTCTGGGGCAGATGGCCCAGGAGTGCATTCCA  
GTCCTACTGCTTCTGACTGTGTGACCTTGGGCAAGCCATTGAACCTCCTTGTTCACGGGGATTGGAATAGCA  
TTGAATGGATGCTACTACAGATTGTATTGATGCTTAGATAAATGAGCCTGCAGAGAGTTGGTGAGGAAAAGATG  
AAAAACATGAGAAATAGGTTGAGCCAGTGAAGGGAGCCATGTGATTTAGGGAGGGAAGAGGGTCACTCTGGCCCT  
ATTATTGAGAAACAGTTCTTCCAGGGACCAGGGGCTCCTCAACAAGGCCAGTCAGCAAGAGCGCAATGAGATGGG  
CCACCTTCGGTGCCAGCACATAGTGGTGATTATTAGTCCATCTCTTCTGACCATAAATTCAGTGGCTTCTTGGC  
TGCCACCAAGGCTCAGAGAGGCTCTATAGAAGCAGGAGTCCACTGGGGTGGGGGTGGTTCCACTGGGGTGGGGGT  
GGTCCCAACCAGCCAGGAGGGAGGATCTCCAGATGGAAGCAGAAGAGAGGGTGAGGCTGGGTTCTAGGGCCA  
TGTATGTATGAAGTCGGGTGCCAGTGTCTGAGGACATGCCTGCTTGGGGAAATCCCACTACACTGAACAA  
CATGCAAGTCCCAAGGAGTATGAAGTTAAGTTTTCAATGGTTTTAGTGGTGTCTTTTTATCCTTGAAGTCCAA  
GAACAGTGTCAATTGGCACACCCACCCCTGGTAGATAAGGTGCTACTGCTCTTGGCTCTGGGGACCATGCCTCCAT  
TTGCCCCAGGACTGGGGATCCGCTGCTGCATTGAAGTCCCTGGGCAGTCAGGCACAGCCCTGCCCTCATGGAAA  
GGGACATGAGGTGCAAACCACATCAACAGTAACAAGGGAGCTCAAATCTCCCATGTGGGCTCCAGGAGACTGATG  
CAGATCTTACCAGCCAGGGTCTTGGGGATCCTTCTGAGGCTCAGTTTCTTCATGTGTAAGGTATGGAAGACAA  
TGGCCCTGCCCTCAGGCTTGTGACAGTGCCATGAAGTGGTGTCTGTACACAGGCAGGCAACAAGCCAGCGCTGA  
GGCAGGAGTCTTGGCAGATGCTGGTGCCACTCCGAGCACACACTGGGCCTTGCTTTAAGGGGCTGGCTTTAC  
TCTCTCCCTTTGATCTGAGCAGCCCAAGGTAAGGGCCATTGATGCCACAGTCCCTTCCCTATGGGGAGAGAC  
ATCTCACAGTCTTATCCTGGAGCCTTCTCTGAATCCTGCTCCCTCTCTTCTCTGGGTGGTAGGGTCAGGAAGA  
GGGTGGTTCTCCCACTTACCCAGCACAGGGCAAGGAAGGGAGTGGCCCCACCAGGAGGAAGGAAGGCCCTTA  
CGTGGTGGGTATGGTGTGCACAGTCTTAGAAACTAGGCTGGCCTCAGTGTGTTTGAAGTCAACAAGCTGCACAGGC  
TCTGTGCCAGGGGACACACATTGAAAGGGGCATGGTTTTCTCTACTCCATGGGAAGAGGCTAGGGTCTGAAGAGA  
TGGAATGACTTACCCAGCATAACCAGACTTGGAATGAGGTCTGGGCAGCTCCAAATCCCGTGTGTGAGCCATAT  
TCCAGCTGGGGCTGGGGGTGGCTCCAGAGTGGAGCTGAGGGAGGATGGGAATTGTGCTCCCTGTGACTCCTGC  
CCCGGGGCCCCGCTACAGTGGGTGCTGTCTTCTGTGCATAAGTTCAAGTCCAGTGTGTCTGCCTGTCACTCCTG  
CCCAGGGCCCAGCTGCAGTGGGTGCTGTCTTCCATGCTTAAGTTCAAGTCCAGTGTGTCTGCCTGTGACTCCTG  
CCTGGGGGCCAGCTGTAGTGGGTGCTGTTCTTCCATGCATAAGTTCCGCATACTAAGTGGGGTGTAGATATGTA  
CCTCTTTTCTTAGGCTCAGAGTCCCCAAAGGGGCCATTGGCCACATTGTCTTACTGAGAAGACCATTCTGGC  
TGTAGAGAGGAACAAAGTGTGTGTGCTCTCTGGAACAGGACCTTCAGCTGGGGCTTTGATGACTTCAGCTG  
CTGCTTGGGGAGCTACGGCTCCGACAAGGTCTGATGACATTGAGAACCTGGCTGCCTGGGGCCGCTGTCTGTG  
CGCCGTGTGCCATCCCCAACACGATTGTACCTCTGGGACCAGCACTGTGGTGTGTGTGTGGGAGCTCAGCAT  
GACCAAGGCCGCCCGAGGGGCTTGCGCCTCCGGCAGGCCTTGATGGACACACAGGCTGTACGTGCTTGGC

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**FIGURE 2376B**

AGCGTCAGTCACCTTCAGCCTCCTGGTGAGCGGCTCCCAGGACTGCACCTGTATCCTGTGGGATCTGGACCACCT  
CACCCACGTGACCCGCCTGCCCCCCATCGGGAAGGCATCTCAGCCATCACCATCAGTGACGTCTCAGGCACCAT  
TGTCTCCTGTGCGGGAGCACACTTGTCCCTGTGGAATGTCAATGGACAGCCCCCTGGCCAGCATACCACAGCCTG  
GGGCCCAGAAGGAGCCATAACCTGCTGCTGCCTGATGGAGGGCCCAGCATGGGACACAAGCCAGATCATCATCAC  
CGGGAGTCAAGACGGCATGGTCCGGGTTTGGAAAGACTGAGGATGTGAAGATGTCTGTTCTGGACGGCCAGCAGG  
AGAGGAGCCCCCGGCTCAGCCTCCAAGCCCAAGAGGCCACAAGTGGGAGAAGAACCTGGCCTTGAGTCGAGAGCT  
GGACGTTAGCATTGCTTTGACAGGGAAGCCCAGCAAAACCAGCCCCGCAGTGACTGCTCTGGCCGTGTCCAGAAA  
CCACACCAAACTCCTGGTTGGTGATGAGAGGGGGAGAATATTCTGCTGGTCTGCAGATGGGTAGGAAGAGAGAGG  
CAGCAGAGGCTCTGGCACAACAGTGCCAGGCTGAGGGTGGCAGAGGTGACTGGGGCCTGAGCTCTGCCTACAGAA  
GAAACCCCCAGGGCCTCCTTCCCCACAGTTCTCAAGGAAGGGCCTCTGGCAATCACAGCTCTGCAGCCCAACCTT  
CTCCATGGCCGATGGGACTTCTATGAAAAGGATGAGCACACACACTCGGAGGGCTGAGCAGCACGCTGAAAAGT  
TGACTTGGTGATGCCAGCTGCACACGAAATTACACATGACTCACCTTATTAAGGGCTATTGCACTGAAAAAAA  
AAAAGATGGGTCGCTTACTGGAAATTATTGTATTGCTTTATTTTATTAAAGCAACTATGTTTTAAATGC

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**FIGURE 2377**

CTGTGACAGACGGCACTCACACTGATTTCTATGTCCTACCAGACACTGCCCTGGCGACACACAAACCTCAAGTAA  
TGAGGGTCCAGATAAGATCATTAGACAATAGGCTTCCCCAGATTACTACCAACAGGGGTGCCCCAGCCTTGAAGC  
GCCTTCACACTGGACACATGGGCTTCCTGATTACCAGCAAGTCTCTGAAGGCAGAAGATCAGGACAGTCCCCACA  
GGCTTCTGAAGTATAAAGTGACCAGAGGACCAGAGCATGGCTTCATTATCAAACTGGCCTTGGAAACCAGAGCA  
CTCGAGTGTTTACACAAGCTGACATTGATGAGATGAAGATATCCTATGTCTTGAATGAGGGCAGCAACGCATCAA  
AGGACATCTTCTATTTCTCTGTGAAGACAATGGAGGAAATAAACTAACAATCAGCCTTTCCATCTAACTGGG  
CTTGGATTTGTTTGGAGAAAGAGTACTACATTGTGGATGAAGATTCCACATTCTTAGAAGTGACCCTTACACGCA  
GAGGATACCTTGGAGAAACATCATTTATCAGCATTGGTACCAAAGATGAAACTGCAAAAAAAGACAAAGATTTC  
AATGGAAGACCAATAAACAGATCCAGTTCAAT

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**FIGURE 2378**

VTDGHTDIFYVLPDTALATHKPQVMRVQIRSLDNRLPQITTNRGAPALKRLHTGHMGFLITSKSLKAEDQDSPHR  
LLKYKVTRGPEHGFIKLTGLGNQSTRVFTQADIDEMKISYVLNEGSNASKDIFYFSVEDNGGNKLTNQPFHLNWA  
WICLEKEYYIIVDEDSTFLEVTLTRRGYLGETSFISIGTKDEAKKDKDFKWKTNKQIQF

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**FIGURE 2379**

GTGCCAACC~~AA~~ACCCTGAACAGAGGAGGTGGCGGTGGTGGCCCTCGCCTGTGGCCCCGTGCTGCTTGCACTCGA  
ACTCGTCGCC~~ATG~~GAGGAGCTCCAGGAGCCTCTGAGAGGACAGCTCCGGCTCTGCTTCACGCAAGCTGCCCGGAC  
TAGCCTCTTACTGCTCAGGCTCAACGACGCTGCCCTGCGGGCGCTGCAAGAGTGTGAGCGGCAACAGGTACGGCC  
GGTGATTGCTTTCCAAGGCCACCGAGGGTATCTGAGACTCCCAGGCCCTGGTTGGTCCTGCCTCTTCTCCTTCAT  
AGTGTCCCAGTGTGTGTCAGGAGGGCGCTGGTGGTAGCTTGGACCTTGTGTGCCAACGCTTCTCAGGTCTGGGCC  
TAACAGCCTCCACTGCCTGGGCTCACTCAGGGAGCGCCTCATTATTTGGGCAGCCATGGATTCTATCCCAGCCCC  
ATCATCAGTTCAGGGACACAACCTGACTGAAGATGCCAGACATCCTGAGAGTTGGCAGAACACAGGAGGCTATTC  
TGAAGGAGATGCAGTATCACAGCCACAGATGGCACTAGAGGAGGTGTGAGTGTGAGATCCACTGGCAAGCAACCA  
AGGACAGTCACTCCCAGGATCCTCAAGGGAGCAGATGGCACAGTGGGAAGTGAGAAGCCAGACCCATGTTCCAAA  
CAGAGAACCTGTTTCAGGCACCTGCCTTCTCTGCCAGCCGAAACGTCTGGACAAGAAACGTTTCAGTGCCTGTAGC  
CACTGTAGAACTGGAAGAAAAGAGGTTTCAAGACTCTGCCTTTAGTGCCAAGCCCCCTACAAGGCCTGACCAATCA  
GGATTTTACAAGAGGGAGAAGATTGGGAGCAAGAAGATGAGGACATGGACCCAGATTAGAACACAGTTCCTCAGT  
TCAAGAAGATTCTGAATCCCCAAGTCTGAAGATATAACAGACTACCTCCTGCAATACAGGGCCATCCACAGTGC  
AGAACAGCAACATGCCTATGAGCAGGACTTTGAGACAGATTATGCTGAATACCGCATCCTGCATGCCCGTGTGG  
GACTGCAAGCCAAAGGTTATAGAGCTGGGAGCAGAGATTAAAAGAGTTCGGCGAGGAACCTCAGAATACAAGGT  
CCTGGAAGACAAGATAATCCAGGAATATAAAAAGTTTCAAGGAGCAGTACCCAAGTTACAGAGAAGAAAAGCGTCG  
CTGTGAGTACCTTCACCAGAAATTGTCCACATTAAAGGTCTCATCCTGGAGTTTGAGGAAAAGAACAGGGGCGAG  
CTGAAGTTATCAAGGGAATTTTGTAGCCTCTGCTTAGTGAAACACAAAGGAACAAAGCAGCTATAAACTAAATAG  
AATGCAACTATCTGCTTTTCTTATGCTGACCACTGGAGTCCATGGTGGCAAGTAGAGAGCTGCTCTAGGTTCTTG  
AGGTTTGGTTTTTATTATTAATTTTTAGGGTATGGGCACTGTGCAAGACTCCATAGCTGTGCCTAGGAGTCTAG  
GAAAAGTGACAGAGGCTTGGCTTTTTTACCTTTAGTTCAGCCAAGTCAATTTCAAGTCTGAGAAATGACATCAT  
CTTCAGGATAAAATAATGAGGACATTAGACAAACCAACTAAGTGAATTTAGCCTGGTAGCCTCTCTAAGGAAA  
CAGTAATAATACTTCTGATAAGAGTTAAAAGAACTTGTAGCATACTGGATATAATGGGAAAGGGCCTGGGTGT  
TACCCATGTACTGAAAATGAACCTTTTACCAACATGGCTAAAAAATTAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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**FIGURE 2380**

MEELQEPLRGQLRLCFTQAARTSLLLLRLNDAALRALQECQRQQVRPVIAFQGHRYLRLPGPGWSCLSFIVSQ  
CCQEGAGGSLDLVCQRFLRSGPNSLHCLGSLRERLIIWAAMDSIPAPSSVQGHNLTEDARHPESWQNTGGYSEGD  
AVSQPQMALEEVSVSDPLASNQGQSLPGSSREHMAQWEVRSQTHVPNREPVALPSSASRKRLDKKRSVPVATVE  
LEEKRFRTLPLVPSPLQGLTNQDLQEGEDWEQEDMDPRLEHSSSVQEDSESPSPEDIPDYLLQYRAIHSAEQQ  
HAYEQDFETDYAEYRILHARVGTASQRFIELGAEIKRVRRGTPEYKVLEDKIIQEYKKFRKQYPSYREEKRRCEY  
LHQKLSHIKGLILEFEEKNRGS

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**FIGURE 2381**

ATGGAAGCCCCAGCTCAGCTTCTCTTCCTCCTGCTACTCTGGCTCCCAGATACCACCGGAGAAATTGTGTTGACA  
CAGTCTCCAGCCACCCTGTCTTTGTCTCCAGGGGAAAGAGCCACCCTCTCCTGCAGGGCCAGTCAGAGTGTGGC  
AGCTACTTAGCCTGGTACCAACAGAAACCTGGCCAGGCTCCCAGGCCCCCTCATCTATGATGCATCCAACAGGGCC  
ACTGGCATCCCAGCCAGTTTCAGTGGCAGTGGGTCTGGGACAGACTTCACTCTCACCATCAGCAGCCTAGAGCCT  
GAAGATTTTGCAGTTTATTACTGTCAACACCGTGACAATTGGCCTCCGGGGGCCACTTTTCGGCGGAGGGACCAAG  
GTGGAGATCAAACATAACCACCGGAGAAATTGTGTTGACACAGTCTCCAGCCACCCTGTCTTTGTCTCCAGGGGAA  
AGAGCCACCCTCTCCTGCAGGGCCAGTCAGAGTGTGGCAGTACTTAGCCTGGTACCAACAGAAACCTGGCCAG  
GCTCCCAGGCCCCCTCATCTATGATGCATCCAACAGGGCCACTGGCATCCCAGCCAGGTTTCAGTGGCAGTGGGTCT  
GGGACAGACTTCACTCTCACCATCAGCAGCCTAGAGCCTGAAGATTTTGCAGTTTATTACTGTCAACACCGTGAC  
AATTGGCCTCCGGGGGCCACTTTTCGGCGGAGGGACCAAGGTGGAGATCAAACGAACTGTGGCTGCACCATCTGTC  
TTCATCTTCCCGCCATCTGATGAGCAGTTGAAATCTGGAATGCCTCTGTTGTGTGCCTGCTGAATAACTTCTAT  
CCCAGAGAGGCCAAAGTACAGTGGAAAGGTGGATAACGCCCTCCAATCGGGTAACTCCCAGGAGAGTGTACAGAG  
CAGGACAGCAAGGACAGCACCTACAGCCTCAGCAGCACCTGACGCTGAGCAAAGCAGACTACGAGAAACACAAA  
GTCTACGCCTGCGAAGTCACCCATCAGGGCCTGAGCTCGCCCGTCACAAAGAGCTTCAACAGGGGAGAGTGTAG  
AGGGAGAAGTGCCCCCACCTGCTCCTCAGTTCCAGCCTGACCCCTCCCATCCTTTGGCCTCTGACCCCTTTTCC  
ACAGGGGACCTACCCCTATTGCGGTCTCCAGCTCATCTTTACCTCACCCCTCCTCCTCCTTGCTTTAATT  
ATGCTAATGTTGGAGGAGAATGAATAAATAAAGTGAATCTTTGC

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**FIGURE 2382**

AAATAAAGATGGTTCCTTAACITTTAAATTAAGATTTTTAAATTAAGATGAATCTTGATTTTTAAATTAGTATGGT  
TTTAAGATAGTTTTACAGATAGATTAGATAATCTATCTAGAGATAGACAGGGAGAGATATCTATCAATACATATC  
TCTATCTAGATATAGATAGATGGTTTTCTATATAGNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN  
NNNNNNNNNNNNNNNNNNNNNNNNNNNTTATATCTACATCTGTATTTCTACATGTATATAGGTATGTATATATCTA  
CATGTATATATGTNNNNNNNNNNNNNNNNNNNNNNNNNNNNATCTGTATATATGCATATACATGCCTATCTATCTTTAT  
CTACATGTATTACATAGATAGGGTAATTACTGATAAATCCTTTGGTCTTCTTTGTAAATCTCTGGGCTAAAGACC  
CCTCCAGTATTATACGTGTTCTGGTCTAGATTGCTCACTCACCAGTTCTCCTCACTATCTAGAGAAGATCCACTT  
AGCAGGCCTCCCCTTAAAGAAGGGCACCTTAACTGGACTCACTCCTCCCATAGTAGACTGCACAGTACACAAGCA  
GAAGAGGAGAGCTCAATAATAAAGTCACCATAAAGGATAATTTTTAAATGAATAAAGACATCAGAAAAATCCAGTA  
TTGGCTAGCACATATGGCTATCAGCAAGCTCACCCTACAAAAAATAGTGAGAAAACAGTTCGAATATTGGCCGT  
TTGGGGCACATATTCTACAAAAGGAAAAGTTTTGAAATGTATATATTTAATTTAACTCTTTAAAAATATTGT  
A



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**FIGURE 2383**

MVFYXXXXXXXXXXXXXXXXXXXXXXXXXISTSVFLHVYRYVYIYMYICXXXXXXXXXICIIYAYTCLSIFIYMYID  
RVITDKSFGLLCKSLG

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**FIGURE 2384**

TTTTACATTATGAATAACTTTTATTTGTTTATACAAGTTTGAATTTTCATCTATTTTTATGTAAATAGCTCGAT  
CTTCAAAAATATCCTTCAGCTCTGACAACCTCTTCACATAACTTTCCTGTAAGATCTTTTAAATATCCAAACCTG  
TAAAAGTCCACATTTCAGTTGTTCTTTGTTTCCTTAGTTTGCTTCAACAACATCAATGCAAGGTTAATAGAAGCTAT  
TTACTTACCATATGGTAGGTGGCTCAGAACCTTCTATTTCTAAGTAATCATATTTCTCTCCATTGAAAATCAG  
TAAATATGAGTGAAATTGTGTCCCAGGCTCTGCTACAATGGTCCAAGTGCAATCAGCATTGTTATGGTACTCAT  
TAGGAAAAC TAGGGCTGGATATGATGCCACTGGATCCTCTCATTGTTCCCTCCACAAGCATCTTCAGCTCTACAGA  
TAGGAACAGGAAAATCCCACGAAGCTGTATTAAGTGAATTGGCCATGCAGGTGAGCTGAGGGTGGCCATCAAGGA  
TGTATCCAGTTACACAGCTGTAGCGGATCTTGTC

**AATGAATCCCTGCGGTTGGCTGGGGGACCTGGGTGCCACACTGCCCTAACTCCCTCAAAATGGGCAGCTTCACTTT**  
**AGAACCCCGGGTGCTTCCCTGGAGCCGAGGTGGCACATCCTGTGTGCGGTGGGCCCTCACCTTGGATCTCCAG**  
**GCCTGACACTGCCAGCTGGATGGAACCATGGCCCCAGCCTTCTGTGCTGCTGCTGCTGTGGCCACAGGGTTG**  
**CGTCTCAGGCCCTCTGTCTGACAGTGTATACACAAAAGTGAGGCTCCTTGAAGGGGAGACTCTGTCTGTGCAGTG**  
**CTCCTATAAAGGGTACAAAAACCGTGTGGAGGGCAAGGTTTGGTGCAAAATCAAGAAGAAGAAGTGTGAGCCTGG**  
**CTTTGGCCGAGTCTGGGTGAAAGGGCCCCGCTACTTGTCTGCAGGACGATGCCCAGGCCAAGGTGGTCAACATCAC**  
**CATTGGTGGCCCTCAAGCTCCAGGACTCAGGCCGATACTGGTGCATGCGCAACACCTCTGGGATCCTGTACCCCTT**  
**GATGGGCTTCCAGCTGGATGTGTCTCCAGCTCCCCAAACTGAGAGGAACATTCTTTACACATCTGGACAACAT**  
**CCTCAAGGGTGGAACTGTCAAACTGGCCAAGCCCTACCTCAGGCCCTGATGCCCTTTTACCACTGGTGTGAT**  
**GGTGTTCACCCAGGACTCATCACCTTGCTTAGGCTCTTAGCCTCCACCAGACCTGCCTCCAAGACAGGCTACAG**  
**CTTCACTGCTACCAGCACCACCAGCCAGGGACCCAGGAGGACCATGGGGTCCCAGACAGTGACCGCTCTCCAG**  
**CAATGCCAGGGACTCCTCTGTCTGGCCAGAATCCATCTCCACTAAGTCTGGGGACCTCAGCACCAGATCGCCAC**  
**CACAGGGCTCTGCCTCACCAGCAGATCTCTCTCAACAGACTACCTCCATGCCCTCCATCAGGCACCAGGATGT**  
**TTACTCCACTGTGCTTGGGGTGGTGTGACCCCTCTGGTGTGATGCTGATCATGGTCTATGGGTTTTGGAAGAA**  
**GAGACACATGGCAAGCTACAGCATGTGCAGCGATCCTTCTACACGTGACCCACCTGGAAGACCAGAGCCCTATGT**  
**GGAAGTCTACTTGATCTGAGGCCACTTAAGCATGGGGTGGGGAGCTTCTCCAGAGTGGCCCCAGGGGGTTAGAG**  
**GAGGGGTGAAGATTGGGGCCAGTATCGATCTTATGAAGCTGGAGGACTTGTGCAGTGTGGACTCACCCAGGACT**  
**TCCCAAACCCAGAGGCTGCCATCCTAAGCAGCCCCACAGCCAGTGTTCTCCTTGGGGGCGAGGAACCTGGGGAGG**  
**GGCCCAGAGCAAAGGGCATCAGGGAGAAAGTCCCCAGGAAATGTGACCAGTGGCTTCTGCTCGGAGCTGCAGACC**  
**CCAGGGCTCTTGGTGGAGGCAGGGGAACCTTGAGAGTGTGTTTACAGAGAACCTCAGCTCCCGTCTGCCTCAGA**  
**AACCTTACTGGGCTGAGCTGCCCTCCCCACCAGGGCCGCTGTGTCTCTGCTTCCCTCCGTTCTGCTTCAGCTTC**  
**CCCTAAGGTTAGGGAAGAAAGAAATCGGGCTCACGAATGCCAGAGGCAGTGATGTCCATCCTGGAGGAGAGGAAA**  
**CAGTGACTAAAAGCTGGGGACCCACAGAGGGGTTGGCAGCTTCTCTTGTGCGGACAGGTGTCCTTTGCTGGGCC**  
**CTGGATGGCCCTGCCCTGACTGGGGCTGCTCCTCCCTCCTGTCTGGGACCCCGCAGAGCCACGCTCTCACTGC**  
**TGCCTCCTGTGGCCGCTGCCTCCTTAGAAAGCTGTGACCAGGCAGCTAAGAGCCTCTGGGCTGCAGGCTCAGCC**  
**TCTCCCAAGACTGAAGTGCAGAGGCTGGACTTGGGGCTCTCTCCCCAGCTTCTACACCTGGGCTCCAAGTCTGA**  
**GTTCCACAGGGGACCCAGCAGCCTCCAGGAAGTCCATACCTGGGGTGGCTGAGACCTTGGCTCTGTATGGAGG**  
**CTGCTCACCCACAGACACTGGTGGGGAGACCATGGCTCAGAGGAAGGGTGGAGCAACCCTACTCCTACCCCTCA**  
**GGATAGAGAGAGAAGACACACTTGGGACACAGTGAAGACAGTAACCTTGGAACTGACCACGGCCTGGAGGACTGGC**  
**CCAGGCAGGGGGACAGGGAAAATGGAGCCCAAGTAGCCCTCTGGCCAGGGACCCAATGTCCCAGGAATCTGCCTC**  
**CCACCCACTGACTCAGGGCTCAGACTCAGCCCTCTATTGTCCAGAGCACTGGCTTGGCGTCCAGCAATGAAGGCTG**  
**GAGAATGCAGCCTGGATTCCCCTACACACACACACACACACACACACACACACACACACACACACACACAC**  
**ACAGGTGTCTACTGACCTGGAGTGACTGGAATAGCACCTGGGGATAAAATGTGACAACTGTGCATTGAACCCTGGG**  
**TCAGGGACGTTTCCAATGGCCAAGAGAGTGACACAGCCAGGACCCCTGGTGGACAGCCAGAGGGGCCACTTCAGGAT**  
**GGATGTGGGGAGAGTGAAGAGGGCAGGGAGTAATCCTGGGGGACAGCAGGGAGGAGGCACTTCTTCCCTATGTCC**  
**AGGAGAGGGCAATAGAGGGAAGACTGAGGCTGAAGAATTGACGGCTCTGGACCCAGGACAGACAGACAGACAGAC**  
**AGACAGACACGCACACACACACCATCTCTGTCTAGCAAGCAGCCTCCTAAGATAGCTGTCTCCTTATCATGACGG**  
**TGTAGCCACCATCCTGTTGTATACTAGGAGAGAACCTTAACCCACCTGGGGGAAAATAGCTCCCCAAGAGCTGGCA**  
**CCAGTACCCTGATGGCCCTGCTTCTCTGAGTGAGATGCCCAGGAGGAGGAGCCCTAGGGAAGAAGTCAGGGAC**  
**AGGGACCAGGATACCCTCTGTCACTGTGTGACCCTCAGCAAGTCACTAACCCTTGGCCCTCATTTTTCTGTCTT**  
**GTGAAAGAGGACAATAATTCTACTTCTCAAGATTGTTTTCAAGATAAAGTAACATTAGCATTGTACAATG**

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**FIGURE 2386**

MNPCGWLGA VGPTLPNFPKWAASLLEPRVLPWQAQVAHPVSGGPSFWISRPDTAQLDGTMAPAFLLLLLLWPQGC  
VSGPSADSVYTKVRLLEGETLSVQCSYKGYKNRVEGKVWCKIKKKKCEPGFARVWVGPRYLLQDDAQAKVVNIT  
MVALKLQDSGRYWC MRNTSGILYPLMGFQLDVSPAPQTERNIPFTHLDNILKGGTVTTGQAPTSGPDAPFTTGVM  
VFTPLITLPRLLASTRPASKTGYSFTATSTTSQGFRTMGSTVTASPSNARDSSAGPESISTKSGDLSTRSPT  
TGLCLTSRSLNRLPSMPSIRHQDVYSTVLGVVLTLLVLMIMVYGFWKKRHMASYSMCDPSTRDPFGRPEPYV  
EVYLI

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**FIGURE 2387**

CGACTCTGAGGTGCATTCTTTTTTTGATGAGAGGCATCTCTAGGTACCATCCCTGACCTGGTCCCTCATGCTGCCG  
AGGCTGTTGCTGTTGATCTGTGCTCCACTCTGTGAACCTGCCGAGCTGTTTTTGATAGCCAGCCCTCCCATCCC  
ACAGAGGGGAGCCCACTGACCCTGACGTGTAAGATGCCCTTTCTACAGAGTTGAGATGCCAGTTCCAGTTCTGTC  
TTTTTCAGAGACACCCGGGCCTTGGGCCCAGGCTGGAGCAGCTCCCCCAAGCTCCAGATCGCTGCCATGTGAAA  
GAAGACACAGGGTCATACTGGTGGCAGGCACAGACAATGGCGTCCAAAGTCTTGAGGAGCAGGAGATCCCAGATA  
AATGTGCACAGGGTCCCTGTGCTGATGTGAGCTTGGAGACTCAGCCCCCAGGAGGACAGGTGATGGAGGGAGAC  
AGGCTGGTCCCTCATCTGCTCAGTTGCTATGGGCACAGGAGACATCACCTTCCTTTGGTACAAAGGGGCTGTAGGT  
TTAAACCTTCAGTCAAAGACCCAGCGTTCACTGACAGCAGAGTATGAGATTCTTCAGTGAGGGAGAGTGTGCT  
GAGCAATATTACTGTGTAGCTGAAAATGGCTATGGTCCCAGCCCCAGTGGGCTGGTGAGCATCACTGTGAGAATC  
CCGGTGTCTCGCCCAATCCTCATGCTCAGGGCTCCCAGGGCCCAGGCTGCAGTGGAGGATGTGCTGGAGCTTCAC  
TGTGAGGCCCTGAGAGGCTCTCCTCCGATCCTGTACTGGTTTTATCACGAGGATATCACCTGGGGAGCAGGTCCG  
GCCCCCTCTGGAGGAGGAGCCTCCTTCAACCTTTCCCTGACTGAAGAACATTCTGGAACTACTCCTGTGAGGCC  
AACAATGGCCTGGGGGCCAGCGCAGTGAGGCGGTGACACTCAACTTCACAGTGCCTACTGGGGCCAGAAGCAAT  
CATCTTACCTCAGGAGTCATTGAGGGGCTGCTCAGCACCTTGGTCCAGCCACCGTGGCCTTATTATTTTGCTAC  
GGCCTCAAAAGAAAAATAGGAAGACGTTACGCCAGGGATCCACTCAGGAGCCTTCCCAGCCCTTACCCCAAGAG  
TTCACCTACCTCAACTACCTACCCAGGGCAGCTACAGCCTATATATGAAAAATGTGAATGTTGTAAGTGGGGAT  
GAGGTTTTATTCACTGGCGTACTATAACCAGCCGGAGCAGGAATCAGTAGCAGCAGAAACCTGGGGACACATATG  
GAGGACAAGGTTTCTTAGACATCTATTCCAGGCTGAGGAAAGCAAACATTACAGATGTGGACTATGAAGATGCT  
ATGTAAGGTTATGGAAGATTCTGCTCTTTGAAAACCATCCATGACCCCAAGCCTCAGGCCTGATATGTTCTTCAG  
AGATCCTGGGGCATTAGCTTTCCAGTATACCTCTTCTGGATGCCATTCTCCATGGCACTATTCTTCATCTACTG  
TGAAGTGAAGTTGGCGCAGCCCTGAAGAACTACCTAGGAGAACTAATAGACACAGGAGTGACAGGGACTTTGTT  
ATCAGAACCAGATTCTGCGGCTCCTTTGAAAACAGGTCATATTGTGCTCTTCTGTTTACAAGAGGAAACAAGA  
TGGAATAAAAGAAATTGGGATCTTGGGTGGAGGGACAGTGAAGCTTAGAGCACATGAACCTCAAGGTTAGTGACT  
CTGCAGGACTTCACAGAGAGAGCTGTGCCCATCATTAGTCCAAGTGCTTTCTCTGCCCAGACAGCACAGAACTC  
CAGCCCCGCTACTTACATGGATCATCGAGTTTCCACCTAAAATATGATTCTATTTATTTTGGAGTCACTGTTACCA  
AATTAGAACTAAAACAAAGTTACATAAAAAGTTATTGTGACTCCACTTAATTTTAGTGACGTATTTTGTATATA  
TAGGCCAACCTATACCACATCCAAAATTATGTATCTATTACAGCCCCTAGAAGCTTTATAAATACAGTGTGTCTT  
CTTTTATTCACAAAATTTTGAATCGTGGTAATATGTTTTGAAACCTGTATCTTAATTATTTTTTTTTTAAATT  
GAGACAGGGTCTCACTCTGTCACTCAATCTGGAATGCAGTGGCACAATCTGCCTCACTGCAACGCCTGCCTCTC  
AGGCTCAAGCAAACCTCTCACCTCAGCCTGCTGAGTAGCTGGGACTACAGGCACATGCCACCAAACCTTGCCATT  
TTTTGTCTTACGTAGAGACAAGATTTACCGTTTTTGCCAGGCTGGTCTCAAACCTCTGGGCTCAAGCAATGTAT  
TGAATTTT

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**FIGURE 2388**

MLPRLLLLICAPLCEPAELFLIASPSHPTGSPVTLTCKMPFLQSSDAQFQFCFFRDTRALGPGWSSSPKLQIAA  
MWKEDTGSYWCEAQTMAKSVLRSSQINVHRVPVADVSLQTPPGGQVMEGDRVLICSVAMGTGDITFLWYKG  
AVGLNLQSKTQRSLTAEYEIPSVRESDAEQYYCVAENGYGPSPGLVSITVRIPVSRPILMLRAPRAQAAVEDVL  
ELHCEALRGSPPILYWFYHEDITLGSRSAPSGGGASFNLSTEEHSGNYSCEANGLGAQRSEAVTLNFTVPTGA  
RSNHLTSGVIEGLLSTLGPATVALLFCYGLKRKIGRRSARDPLRSLPSPLPQEFTYLNSTPTGQLQPIYENVNVV  
SGDEVYSLAYYNQPEQESVAAETLGTHMEDKVSLDIYSRLRKANITDVDYEDAM

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**FIGURE 2389**

GCCGGAGTTCTGTTGGGCTGTGGCTGGGCTGGCCAAGGCGGGCATGGAGGCCGCGCTGCTCAACGTGAACCTGCG  
GCGCGAGCCCCCTGGCCTTCTGCCTGGGCACCTCGGGCGCTAAGGCCCTGATCTTTGGAGGAGAAATGGTGGCGGC  
GGTGGCCGAAGTGAGCGGGCATCTGGGGAAAAGTTTGATCAAGTTCTGCTCTGGAGACTTGGGGCCCGAGGGCAT  
CTTGGCCGGACACCCACCTCCTGGACCCGCTGCTGAAGGAGGCCTCTACTGCCCCCTTGGCACAGATCCCCAGCAA  
GGGCATGGACGATCGTCTTTTCTACATCTACACGTGGGGGACCACCGGGCTGCCAAGGTGCCATTGTCTGCA  
CAGCAGGTACTACCGCATGGCAGCCTTCGGCCACCACGCCTACCGCATGCAGGCGGCTGACGTGCTCTATGACTG  
CCTGCCCCCTGTACCACTCGGCAGGAAACATCATCGCGCTGGGGCAGTGTCTCATCTATGGGCTGACAGTCTCCT  
CCGCAAGAAATTCTCGGCCAGCCGCTTCTGGGACGACTGCATCAAGTACAACGTACCTGGCACGGCCCATCTG  
GACTGAGAACTGGAACCTCAGAGGAACCCGTGCCTCTCTGCTGCCTTGGTGCCCCCTGTGTCTGCCTCCTCTCCC  
TGCTTTTTCAGCCTCTGTCTCCTTCCATCCCTGTCCCTGTCTGGCCTTAACCTCTCCCTCTTTTCTTTTCTTTCT  
TTCTTTTCTTTTTTTTTTAAAGATAGAGTCTCACTCTGCTGCCCCGGCTAGAGTGCAAGTGGTGGGATCTCGGCTCAC  
TGCAACCTCTGCCTCCTGGGGTTCAAGTGATCCTCCACCTCAGCCTCCTGAGTAGCTGGGATTACAGGCACCCG  
CCACCACGTCCAGCTAATTTTTATATTTTTAGTAGAGACGGGGTTTACCATGTTGGTCAGGCTGGTCTTGAAC  
CCTGACCTCAGGTGATCCGCTGGCCTCGGCCTCCAGAGTGTGGGATTATAGGCGTGAGCCTCTGGCCCCGGCCT  
TTCTTTTTTCTCTCCTCTCCTGCGGAGAGTGGAACACACGTGTCTGGGAGCTGCATCTTGTGTAGGGTCCAGC  
TGCTTTTGGGGACTGCAGGAATCATCTCCCCTGGGCCCTGGACTCGGACTGGGGCCTCCCCACCTCCCTCTCGGC  
TGTGCCTTACGGAGCCCCAATCCAGGCCTCCTGTGGCTGTTGGGTTCAGATGCTGCAGCTCCATGTGACTTCCA  
AGCAGGCCCTCCGCCCTCCCTGCTGAATGGAGGAGCCGGGGTCCCCAGGCCAACTGGAAAATCTCCCAGGCTA  
GGCCAATTGCCTTTTGCACCTCCCCGTTCTGTACATTTCCCCAGCCCCACCTTCCCTCCTGATGCCCTGAAA  
GCTTCCGGAATTGACTGTGACCACTTGGATGTCAACACTGTGAGCCCTGCCTTGATGTCCCCATTTAGCCATCT  
CCATGGAGCTCCTGCTGGAGGGCCCTGAACCTGCACTGCGTGGCTGCCCAGCCAGCTGCCTCCTGTCTGGGAG  
GAGGCCTCCTGGGTGTCTCATCTGGTGTGTCTACTGGAGGGTCCACAGGAGAGGCAGCAGAGGGGTGAGGGGA  
GGTCTCCTGCCCCGGGGTTGGCCTCTCAAGCCTCAGGGGTCTAGCCTGTTGAATATACCCACCTGGTGGTGGCC  
CCTCCGATGTCCCCACTGATGGCTCTGACACCGTGTGGTGGCGATGTCCAGAAAATCCCACCAGGACGGCCCA  
GACATCCCTACTGGCTTCGCTGGTGGCTCATCTCGAACATCCACGCCAGCCTTTCTGGGGCCGGCCACCCAGGCC  
GCCTGTCCGTCTGTCTCCTCCAGCAGCACCCCTGGCCCCCTGGAGTGGTGGGGCCATGGCAAGAGACACCGTG  
GCGTCTCATGTGAACCTTCTGGGCACTGTGGTTTTATTTCTTAATTGATTTAAGAAATAAACCTGAAGACCGTC  
AAAAAAAAAAAAAA

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**FIGURE 2390**

GCCGGAACCAATGTGCCCTGGGCCACTGGGCCGTGAGCAGCCACCGACTGGGGGCAACTTGGCACTTAGAACCGC  
AGCAGGGACGTCGGTTTGTCTATCGGGACTCGGCGAGGACGATGGAAATCCTGTATGAATGTGGAAGCCATTAGCA  
GAGTAATTGCTGTCTGTTACCATGACAACCAGCCGCTGCAGTCACCTGCCCGAAGTCCTGCCAGACTGCACCAGC  
TCAGCTGCACCCGTGGTGAAGACGGTGGAGGATTGTGGCAGCCTAGTGAATGGGCAGCCGCAGTATGTCATGCAA  
GTTTCAGCCAAGGACGGGCAGCTGCTGTCAACAGTAGTGGGACTCTTGCCACCCAGAGCCCCCTCAATGACCGG  
CCGATGTGCAGGATCTGCCACGAGGGCAGCAGCCAAGAGGACTTGCTCTCTCCATGTGAATGTACAGGGACCTTG  
GGGACAATTATCGGAGCTGCCCTGGAGCACTGGCTGTCTCCTCAAACACCAGCTACTGTGAATCTGCCACTTC  
AGGTTTGCAGTCGAGCGCAAACCCAGGCCGTTAGTGGAGTGGCTGAGAAACCCCTGGCCCCCAGCATGAGAAGCGG  
ACTCTGTTTGGCGACATGGTGTGCTTCTTGTTTATAACTCCCCTGGCCACCATCTCGGGCTGGCTGTGCCTGCGG  
GGCGCCGTGGACCACCTGCACITTAGTAGTCGGCTGGAAGCCGTCGGACTGATTGCACTCACTGTGCGCACTCTTC  
ACTATTTACCTCTTTTGGACACTAGTGTCAATTTAGGTACCCTGTGCGATTGTACAACGAGTGGCGTCGGACCAAT  
CAGAGGGTGATTCTCCTCATTCCAAAGTCTGTCAATGTACCTTCTAACCAGCCGTCCTTGCTGGGCCTCCATTTCG  
GTCAAGAGGAACTCAAAGGAGACAGTTGTTTGATGTTTGTATGGTTGGTTGGTTGTTTGATTCAATGTTTGGGGT  
TTGGAAGTGTCTGCACTGGGGTCACTGCACTGAGCGACCCCCAAGCCCTTCCTTAAGCCTGTGGGTCTAAGAACAT  
CCAGAGCATATTAGCACATCACTCCAAGCAACAACCTCCGCCAGAAGAAAGCAAATGCTGTTTTACTTCAAATGA  
TGGATGCTGCAATCATATGATATTTGCTAAGCTGCCAAACATGTTTATTTAGCAGATACTGTATGGAATTTCTG  
AACACCTCTTTAACGTATGAGGAAGGTTGTCTGCTACGGATGCAATTCAATTCTTCCTTTTTTATTACTATTTTC  
AAACACACACACATATATATATATATATATTAACCTTAGATGATAATCAAATCAAAAAGTCAACGTAAAACTG  
GTTTCTTGGTTTGGTTGGGTCTTATTTGAGTTAGTTTGTCTCAGTTTCTCGTATGGATTCTTTGGGGTACTTT  
GGTAGCCTGAGTGGTCTTTTTCATCTCTTTCGCGTCCATTACTCAAGGAGACAGCATAACAGATGCAGAACAAAGT  
CATATTTGAAGAATGTTTGTACTAACTTCATTTAATTATTCAAGTTTAAAGGGAAAAAGGGCGTGAGCTCAC  
ACAGTGAGCTGTTTATTTAAATATCATTAAAGGAGAAAAAAATATGGTGAGAAGCTCGCTCTTTCAACTTGTT  
TGGTACTGACAGCTGATAGAAGCTATTTCTAATAATAAACATCCAGTGTGTGAAGACAAAAAAAAAAAAAAAAA  
AAAA



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**FIGURE 2391**

MTTSRCSHLPEVLDPDCTSSAAPVVKTVEDCGSLVNGQPQYVMQVSAKDGQLLSTVVRTLATQSPFNDRPMMCRICH  
EGSSQEDLLSPCECTGTLGTIHRSCLEHWLSSNTSYCELCHFRFAVERKPRPLVEWLRNPGPQHEKRTLFGDMV  
CFLFITPLATISGWLCLRGAVDHLHFSSRLEAVGLIALTVALFTIYLFWTLVSFYHCRLYNEWRRTNQRVILLI  
PKSVNVPSNQPSLLGLHSVKRNSKETVV

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**FIGURE 2392**

TCGGCTCGCGGCTTTCTGATTATGCAGAACTTAAATCTATGCCTCAGTGACCCATACAGCATTCCAGTTCCTATC  
ACCTACTGTCTTGTCCCTATACTTGCAGCAGTTGTCCAGGGTTATTCTTTGTCTGTATTAGAATTTTTTTTCAGG  
TTGCTTAAAGGAATCTTGCAGATACTTGTGACAAAGAATCATAAATGCTGTTGTTAAACTGAATAATGAATTGAGT  
CCCAAATGTTCGTGCTAATTAATGCTTTTTTGAGTTGGAGATGAAATGAGAGTAATATCATCAAGCTGTGGATTAA  
AGTTATCCTCAAAGCCCCATCATCTACAAAAGAATAGGACAGGAACTGCCTTTGTGCAGGTGCAAGACCATGTT  
ACTTTTGAGCAGTGAGCTTGAGATGTCTGGGATACAAATTGGGTTCCCTATTAATACTAATCATTCTTTTTTT  
TCTTTCACCTTCAGCCACTCACAACCTGACCTTCACTACTATTACATCCTGGAGCTGTCGTTTTATTGGTCTTTGA  
TGTTTTCTCAGTTCACTGATATCAAAAGAAAGGACTTTGGCATTATGTTCTGCACCACCTTGATCTATTTTCT  
TGATTACCTTTTCATATGTCAACAATATGGCCCGAGTAGGAACGCTGGTCTTTGTCTTCATGATTCAGCTGATG  
CTCTTCTGGAGGCTGCCAAATGGCAAATTATGCCAAGTTTCAGAAAATGTGTGATCTCCTGTTTGTATGTTTG  
CCGTGGTTTTTATCACACACGACTGGGTATATTTCTCTCTGGGTGTTAAATACCACATTATTTGAAAGCTGGG  
AGATCGTTGGACCTTACCTTTCCTGGTGGGTTTTTAACCTACTGCTATTGCTAGTACAAGGGTTGAAGTCTTCT  
GGTCTTACTTGATTGTGAAAATAGCTTGCAAAGCTGTTTCAAGAGGCAAGGTGTCCAAGGATGATCGAAGTGATA  
TTGAGTCTAGCTCAGATGAGGAGGACTCAGAACCTCCGGGAAAGAATCCCCACACTGCGACAACCACCAATGGGA  
CCAGTGGTACCAACGGGTATCTCCTGACTGGCTCCTGCTCCATGGATGATTAATTACTCAAACTACAAGTCCCA  
AGCAAAGTGAAGTATTTGTTCTGGAAGTATTTAATAAGTTGCAAATGCAGTTCCTTTCATAATATCTCAGCACC  
AGAAACAAAAATTAAGATTATCAAAGCATTTTGAATAGTGCAGTGCCTGTGCTGTGATGAAGAAGAA  
TTACCATTCTCTCTTTGTAGGCATGCTGTATGTAATTGACACAAGGGAACAGTATTTGCATTTGTACTGTCTTAG  
AATATTATTTATTTTTTTGTATTTGTAAATCTGTGGACAAAAGAGGGTTTCTCACTCCTTTTACTCACTGGGCT  
CATGACAGTGAAGGAGATGCTCCATCTGCTTCTCCCCCTTCTCTTGCTGTAGTCCAATGTGCTATGAGCATCAG  
CTTACTTTGTCACTTAGAGCAAGCAAAACCCAGTGCAAGAGTCTCGTTCAGCTCTAAATAGGTTTGCTTTCTTTT  
AGTTACAGTGCCCATTTTGAAATTGCCTATACAGTCTTAGTGACCATTTAAACCGGACGAACTAGGTGTTTAATT  
TTCATCTTCATGTTCAATTAGCAGTTCAAATTAAGAAGATGGTTATTGGAGAAGTTTTTTGAATGGTTTTGTA  
TTAAATTGCTTTGAAATAGATTTCAATTTCTTGTGCACACAGCCAAGATTTCTTCAATGGGTGTGAGCTAGTTGAG  
GGTTAACCTTGTAGGTTGCAGANNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNGATGAGGTCAGTGCTCTGATT  
TTGAAGGAGGATATTCAGTGAAGCTCATAGTTATAACAAGGAAATCACTGTTAAGAATGGGAATTTGTCTCTGTG  
TTCTGGGAATAACATAAAGAGAGCAACTGATTCAGCCAGGTTTTGCCACTACCTATAATTAGTGCAGTCTTAT  
GTTATAAAAGAAAGAAGTTAACTATATTTGGGGACAAAAAATATTTCAAGAGTTGATAAAGATTACCTGTGCAG  
TGCAGAGCACTTTAATGCAACCAGCTTTCAAGAAAAAGCCCTATCTAGTACTTGATGTTGATGTTTTTATTTTGC  
TGAGCAAAATAAAGCCAATGGGAGAAGGACAA

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**FIGURE 2393**

MFSQFTDIKRKDFGIMFLHHLVSIFLITFSYVNNMARVGTLVLCLHDSADALLEAAKMANYAKFQKMDLLFVMF  
AVVFITTRLGIFPLWVLNTTLFESWEIVGPYPSSWWVFNLLLLLVQGLNCFWSYLIVKIACKAVSRGKVSDDRSD  
IESSSDEEDSEPPGKNPHTATTNGTSGTNGYLLTGSCSMDD

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**FIGURE 2394**

AATTTTATTAAAAATTTTAAAGAATTTGGTTTTGGATTAAAAGGCATGCAAGCAGCATTAAATCCACTCAC  
AGTTACAGTCTATCACCTGGGGCATTCACTACTTTTCAGAGTCAGATCACAGTTCAAAAGACAGCTCTCACCTTG  
GGGGCATATCCCCAAGTCAGTGTGAACATGCTTTGTCCCAAGAGGACACTTTATACGCATGGATGTTACAAAAT  
TTATTCTAAACTGCAGGTGTCTGTGAGGATTCAATTTGTTAAACATGTCCTCTGTGTTAAAAATCCTAAAATCCTT  
TTGCATTTCTTAGAAAAATCACGTTTCTGATGAAATTTCTAAAGATGTTTGCAATATTAACTAGAATATATTAA  
CATGTATAATTTTGAGACAAGGTCTTGCTCTGTCAACCAGGCTGGAGTACAGTGGCTCGATCATAACTCACTGCC  
ACCTCACGATCCTCTTGCCCTCAGCCCTCCGAGTGGCTGGGACTGCAGGCGTGTACCACCATGCCTGGCTAGTTTT  
ATTTTGTACATAGCCTTGAACAACCTGAGCTTAAGCGATCATCTCCCTCAACCTTCCAAAGTGCTGGGACTGT  
AGGCATGAGCCACTGCACCTGGCCTGAAATTACATTGTTACAGGCACGTAAGTAACACTTCCTGGATCCAAAAAT  
GTGTATTCTGCATTTCAACAACCTGAACCTTAAGCGATCATCTCCCTCAACCTTCCAAAGTGCTAGGACTGTAGGC  
ATGAGCCACTGCACCTGGCCTAAAATTACATTGTTACAGGCACGTAAGTAACACTTCCTGGATCCAAAAATGTGT  
ATTCTGCATTTCAACAACCTGAACCTTAAGCGATCATCTCCCTCAACCTTCCAAAGTGCTAGGACTGTAGGCATGA  
GCCACTGCACCTGGCCTAAAATTACATTGTTACAGGCACGTAAGTAACACTTCCTGGATCCAAAAATGTGTATTCT  
TGCATTTTCATATTAATAAAAAAGCAAGTGCTTGGGATACAAATATCTGCATGAAAATTTAAAGACTTTATTCC  
TGACTGGTATCACTTTTAGTAAGCAGTTGAACATAACTTGTAGTGTGAATATGGCTAAAACAAAGGACACCTGAT  
GTCTGTGAAGTCTGCTAAGGACAGGTACAAAATTTATGCATTGCTTTTTAAAAAGTTTAAATGAGGAATGCTTT  
TGATAATCAGAAAGACTAATGTAAAGTGCTGACTGATGTCTGTCTGCAGTTAAGGAAGACACCCAACTCTCTTC  
TTCCTCATCATGGTATTCTCTATGTATAGATCTCTAAAAATGCAAACTTCCTATGGACAAGACAATATGATTTGC  
TATAATATGAATTAAGATATGGTAATATCTAATAGTCTCCACTGCTAGGATTCTGAGTAACACAAAAATAGGTT  
TTATAAAAAGCCCATGCACTTCAATTGGTGGGGGAAAAGAATAAAGTCATTTTCAGTCGACTGACTCTGTAAAC  
AGATTACCAATATAACAAGCTATGTTATCTAAATTGCCCTGGCAGTCTTCAGTTTTCTTAAGTAAACAAAGTAA  
AAGGAACAATAAGGATGCAGGCGTAGTAATAGCTGTGGAAAAGATGAACTACAGCCACAGTGACCTGTGGGCAG  
CCTGCGTAGAGATAAGCTGAGGTGTGAGTCACTGATCCTGGTAACGATACTCCATGGCTGCATGAAGATGCTG  
GAGGCATCAAGTGGGTGGCCTTAACCTCTAGTGGATTCACTAGGCAATGTAAATTGGTTAGTGGGTTCCCGTAAGT  
GCCTGTAACAATAAAATTTCTTTTTCAATGTCCCCAAAAAAAAAAAAAAAAAAAAA

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**FIGURE 2395A**

GCTTATATTTTTTCCAGCTCCCAAATTCCTTTATTCCACTTTAGTCCCTTCATTTTCAGAGATGAGGAAACAGA  
TTGCTTTGTTCAAAGACAGCTAGAACTAGAACACAGGCTAATACTTGCTAGCCATGTGATATACTAATGTCAGCC  
AAATACGGGCATTACACTTTTACAGATGTTTGCCATATCTGTGCACCTTACTAATTCTGTTTAATACAATTTAAATT  
GACTCCTTTTAAATAAGCTTATTTTAAAGGAAATTTTTTGCTACTATAAATAGAAAACCATTATATCCTTTAAATA  
GTAACCTCTAAATAGGAATTCAAAACAAAGCAACGTTATTAAAAATTTAATTTAAAATTAATTTAAATTTAATTGTT  
ATTAAATTTTTTAATTATTGCTGTTCTTCGTCAGAAATGTGTCAAAGCATTGTTTTCATGTTTGATGTCAGTTCCT  
TAATTGTCTAAACAGAAAAAGCACAGCTAATGCCTCTAGTTAAGCTTCTGTATAACTTTTTTAAATGAAATGCTT  
CTTAGAGGGGAAATGAGAGGGCATGAATACATGTTTATATACTAAAGTATGATTTTCATGTATATCAGAAGATCCT  
ATTATATGGAACCAAATATTCTTTGGTTGATTTAATTGTTCTTGAACTTCAGTTTTTACCTTGAAGGTTTTTA  
GTTAGCTTAGCATAGTTTATTTTTCTAAATAAGGAATCTGATTGCCTCACAACCTCAGATGTATCACAGTTATGG  
TGAAATAGCAATATATTGGTTTCTGTAACCTTTTAAATACCGTAATGAATTTAAATCTCTTCAGCAAAAGCAAT  
ATATCTAGGGTGACGAGAGGTGTTTTAGTGTATTGAATGATGGAAATGTTTTCTTAAATATTCTGAAGCA  
TTTTTTAAATAATTTTTGAATTTATTGATGATAGTAGTTGTGTGTTAGTGTGAATGACTGGTCTAAATGTGTA  
TGTCACCTTCCAAGGGATTAGTAGGGGTCAGAATGATTGTTTTATTTCATTGACTTTTCTTTGACGTGTTCTTAT  
TCATTGGGCTACATACATTCCCTGTTGCCTTCTCACCAAAAGTGCCACTACACAGGCTGATTTTCATTGTACTGT  
AGAAAAAGACAAGTAGACCTTTTTTCATTTCATGAGATTCTATGAAATCTGTTGGTGGAGGTATAAAATGAGGAGA  
CTTTTATGGGCTAGCTAGTAGGAGTTTTGCTGTGAAACCTTTGTAACAGGTCTATCAGGAACCTAGGGAGAGAAAT  
AAATGCAGGAAATACCTGATCCCATTAAGTGAAGGATGAAAAAGACATGATAATTTTTGGGGATTATTATTGT  
GTGATTTTCCGGCTGATCAGAAGTGTTAATTTTTTGTATACCTGTGTCAAATACATATATATATATATATTTTG  
AAATGGAGTCTTGCTCTGTCAACCAGGCTGGAGTGCAGTGGTGCATCTGGGTTCACTGCAACCTCTGCCTCCAG  
GTTCAAGTGATCCTCCTGCCTCAGCCTCCCGAGTAGCTAGGACTACAGGCACGTGCCACCACGCCCTGCTAATTT  
TTGTATTCTTAGTGAGATGGGGTTTACCATGTTGGCCAGGCTGGTCTTGAACCTCCTGACCTCAAGTGATCTTC  
CCACCTTGGCCTTTCTGAACTATTTCTTTACACACATTTAGAATACATCTAAGTGTATTATAGTTTTCACTTT  
CACCATCAGACAAAATTCAGAAGATTCAAGAGAAGGAAAGTCGATTGTATTACTCATATTTTTGCTACCGTGT  
TTTACATCTCATATTTAAGGCTCTCTTAATTATTTATTTCTGTTTAGTTAATTTCTCTAGCCATTCTTTATT  
TATAGTGGGTCTGCTGGTAACAAATTCCTCAATTTTTCTCGTCTGAGAATGCTTTGACTTCCCTTCCATTTTT  
GTCAGCACCTGAAAAATACTATGCCACTATCTCTGGGTCTGTGGTTTCTGATGAGAATCCACTGTCAGTCTA  
ATTGTCGTTATAAATGCAGTGTCTCTCTCTCTCTCTGCTCCAGGATATTTTTCTTTTTTTTTTTTTTTTTT  
TCTTGAGACGGAGTCTCACTCTGTGCGCCAGGCTGGAGTGCAGTGGCGCAATTTGGCTCACTGCAAGCTCTGCC  
TCCCGGGTTCAAGCGATTACTCCCACTTTAGCCTCCCAAGTAGCTAGGACTACAAGGCACACCACCATGCCTGGC  
TAATTTTTGTATTTTAGTAGAGACGGGGTTTACCATGTTGCCCAGGCTGGTCTCGAATCCTGACATCAAGTG  
ATCTTCTGCTCCGCTTCCCAAAGTGTGGAATTACAGGCGTGAGCCACTGCTCCAGCCTCTTTATTTTTTCA  
GCTTTACTCTTTCTCTGCTTTTTGACATGTGTGTCCAGTGACACAGTGTAGATTTTGTATAGTCTCACGC  
ACGGGTCTATAAGGCTCTGTTTTTGTTCATTTGTTTTTCTATTTTCTCTCTATTTCAGATCGAGTAATTTCC  
ACTGTTCAAGTTTTATCATAGCTGCTTTTAAATCTTTGTGAGGTAATCTGTCTATCTAAGTTTTGGCACCTATTGA  
TTATCTTTTGCATTGTTTTTGTTCCTGTTTTGTTTTGAGATGGAGTCTTGCTCTGTTGCCAGGTTGG  
AGTGCAGTGGCACTGATCTCGGCTCACTGCAACCTCCTCCTCCCGGGTTCAAGTGGTCTCCTGCCTCAACCTCC  
TTAGTAGCTGGGATTACAGGCATGTGCCACCACGCCCGGCTAATTTGTATTTTAGTAGAGACCAGGTTTATCC  
ATGTTGGTCAAGGCTGGTCTCAAACCTCCCAACCTCAAGTGATCCGCTGCCTCGACCTCCCAAAGTGCTGGGATTA  
CAGGCGTGAACCACTGCACCCAGCCTATCTTTTGCATTGTTTTTAAATCTTGTTCTTGCTAGGATGAATGATTTT  
TGTTAAACTAGATATTTTCATATTATGTTTCTAGGCTCTGGATATTATCTAAACCTTCTGTTTCCACTGGCTTT  
TATTGACACTGCTTTTGCAAGGTCTAGGGGGTGCTCATTACTGCCAGGTGGACATAGAAGTCAAGGGTCCCTA  
CTCAGCCTCTACTGATGCCTCAGGAAGAGGATCCTTCTGTTATTGCTGGGTGGGGGTGGAAGTCTAGCTGACAC  
CTACTGAGGTAGGTGCTGGGGCATGCCCGCCATCAGGGTGAAAGTCTGGCTCCCTAGTTGGCTACTTTTACA  
TTGCCCTAATAGGGCATTTGGAGCTCCTCACTATGTTTTATGAGCTGGAAGTCAAGGCTCCTCACTTAGCTTTTCT  
TGGTGTGGGTGGTGGTGGGGCAAACTGTTTTCTGGGTTTGGCTGGAGTGGAGCAGTTACTGTCAAAGTTTTCT  
GTCTTGCCAGGCTGTCCCTTTCTTGTTTCTTTGGCTAGAGAGAGCAAGCTTTTGTGTGGCTCTTTTGTCTGTG  
CCAGTTGGCATTTCAGGTTGCTGCCTTCTTTAGCTCCAAGTCTGGGATATATTAGGCAAAAAGAAAACCCAGAG

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**FIGURE 2395B**

AATTTACACCACCGTGTTCATTCATGGGTCCCTGAGGTCCCTTACTTAGTCTGCCTTCTCTCCACTTTTCACAGTC  
TTCTCATGTTTTGTATATAATGTCCAGGGTCTTTAGTTATACCTTAGCAGAAATAAAAGGGAAAAGTATGTCTGCT  
CTATGCTTCTGTAAGTGAAGTCTTCAAATTTGCAATTTTGATTCCCTTAAACAGTTTTGTAAATATATAATCA  
TTATTGGGCAAAATGTCCATAAAATGTATATACCTTGATGGTTTGCATAATATTGTGTTCAAGAGGACTGCT  
GAAAAATAACATCTTTATTTAACTGAAACGAATTGTTACATTATTAATGAAAACCTTTCCCTCTAGGAAATA  
ATGCAAAAGGTGTCCCAAGGCTCCTGACCAGTGAACAAAGATTTGAGAAAGACAGCCAAGCTCATGTTTTCTCCT  
GATCAAGAAAATCATCCATCTAAAGCACCAGTAAAATATGGTGAACCTATGTCTTAGGCTATAATGGGTCTCTC  
CCAAATGGCGATAGAGGAAGGAGGAAAAGTAGGTTTGCTTTGTTTAAAGACCTAAGGCAATGGGGTGAAGCCC  
AGCACTGTGCATATTGCTTGACTCCTCAGGCTGCAAGGCAATAAGCAACAAAGACCAGCATAGCATATCATAT  
ACTTTGTCTCGGGCCAGACTGTGGTGGTTGAATATACTCATGACAGCAACACAGATATGTTTCAGATTGGCCGG  
TCGACTGAAAGCCCCATTGATTTTGTAGTAACTGACACGGTTCCTGGAAGTCAAAGTAATTCTGATACACAGTCA  
GTACAAAGCACTATATCAAGATTTGCCTGCAGAATCATATGTGAACGGAATCCTCCCTTTACAGCACGGATTTAT  
GCTGCAGGATTTGACTCATCAAAAACATCTTTCTTGGGGAGAAGGCTGCCAAATGGAAGACATCAGATGGACAG  
ATGGATGGCTTGACCCTAATGGTGTCTTGTGATGCATCCACGCAATGGGTTACAGAAGACTCCAAGCCTGGA  
ATATGGAGAGAAATATCGGTGTGTGGAAATGTATTTAGCCTACGTGAAACCAGATCGGCTCAGCAGAGAGGAAAA  
ATGGTGGAAATGAAACCAATCAGTTACAAGATGGCTCGTTAATTGACCTCTGTGGTGAACATTGTTATGGCGT  
ACTGCAGAAGGCCTTTCCCACTCCTACCGTGAAGCATTTAGAAGCTTTAAGACAGGAAATCAATGCAGCACGA  
CCTCAGTGCCCTGTAGGGTTCAACACACTAGCATTTCCTAGTATGAAGAGGAAAGACGTTGTAGATGAAAAACAA  
CCATGGGTATATCTAAACTGCGGCCATGTACATGGCTATCATACTGGGGAACAAAGAAGACGTGATGAAAA  
GATCGTGAATGTCTATGTGTAGGTCTGTTGGTCCCTATGTTCCCTCTGTGGCTGGATGTGAAGCTGGATTTTAT  
GTGGACGCCGGCCCTCCAACCCATGCGTTTAGCCCGTGTGGGCATGTGTGTTGAGAAAAGACAACCTGCCTATTGG  
TCCCAGATCCCACTTCTCATGTTACTCATACTTTTCATGCAGCCTGTCCCTTTTGTGCACATCAGTTGGCTGGT  
GAACAAGGCTACATCAGACTTATTTTCAAGGACCTCTAGACTTAACCAGACCATTGTCTTGCAGGACTACATTATA  
AATTTATAAGCTAAGTGAGTTGGGTTTTCGAACCTGTGTGCCACGTCACAGTTTTCTGCTCTGGTCATTTGCAT  
TAAGATGAAGAATTTTTTAAACATTATAATAAATAGTAGCAATTTCTGAGCAAAAATCTGGGAAACTCAAGCA  
AAGGAATTTCTGAAAGTATCAGTCTTCTGAATTTCTGAGTTTTGAAAATATATTTTGAGGAGAAAAAGCATAGTC  
TAATTTGATGCCTTCCCTTTAGTGTTTTGAATCACCTATCCTCAGTGCTGAAATTGTTTTGTATACTGAGGGT  
ACTGTTGGTTCAAACATGTAGTTTACAGTTTGTGCAACATTGTAATAACAGCGACATGTATATTAACCTT  
TTTCTATTATCTTTATTATAGAAAATACCTTAGAATGTTCTTGATAGAGTAGCATGGTAACGATGGTGTACAC  
CCTTGGTGTGAATGGTAGCTTAGTGAGCAACCTAGCTCAAGGATTTGCAAAGTTAGGAAGAAGGACGAGAGGCC  
TCTCTCCCCACCCCAATCTAAATATGGAATTTGGTAAATTAGAATACTTTGTAATTTGTAAGACCAAAATTCATAC  
TAATTACCCGCGTGAAGGTGTTTGTTTTAAACAACATTGAAGATAATCAGGAAAGATTTTTCTTAATGTTTCT  
CTCGAGCGTAGTACTATAACAAAACCTTAATGCTAAGAAACATTTTATATGCTCCTTTGGATATGCAATTTAATC  
TAGATTATCTATTTTTCTCCATGATACTAATCTGTTTTTAGTATCAGCAGCATTGGCAAGTTATTTTTTGG  
ATATAAATCTGGTTTCATCTGTTCACTGTTCTAGAAAAAATCATTGCCATAAGAAAAAGTATAAATTAGCAAG  
AAAGGAGAGTGACTTGATTGCTTTTGGAAAAAGAAATGCTTAATTAATTATTCTGTATTGGCCTTATTCGGGC  
ATTAGGAAATCTAGAGATCTAAAGGGTTGAATGACAATAGTGCCCCGTTTTTAGCAGACCAGCCTTAACCTCGG  
GTTTGAATCCTAAGGAGATTGCCACAGTGAGACTTAAGGAAATGTTTGGTTGGCAGATGAGACCAATGACTGCA  
GCGTGGAGTGACGCACTGCATGGTCTGTTTATCTCTAATTTCCAATATGTCTTTTGCTTCCAGAAGCAAGAAAAG  
TTTCTTCTCTCCCTCCTTCCACCCTTTTTCAAAGGCACCACAAGTATAGACAGTTGCACTACATCAAATCTT  
TTTTTGACACTGTAGAAACCAGTACACTTTTAGATTAGACAGTATCTTCTTTAATATTTGATTTGTTTTCTT  
TTAGTTTGAAAAGTTGTATAATACTTAACTGACTGTAGCAAAGTTTTATATGTGGTAGCATACCTTTAATTTATC  
CTATTACAAAACGTCTGAAATTTCTTTTGGTTTTTAAAAACAAAACCTTGTGCTTAGAAGCCATGAATTATT  
TTATTTTACTTCAACTGTGCAAACTTCCTTGTTTTAAAAATGATCATTGGGTTCACTCAGGAAATGCATGTCA  
GGAAACTTGTATTATAAGTTTATTAGTTGTGATGTATCAGTAACTGCTGTACCCTTTTTCAAAGAAATGTAAT  
TGATTTTGAAGTTTCTAGATTGTCACATGCTTTGTGACTAATGCAAGAAAGCAAGTCTGTGTGTATTGTTTCT  
TAGTCATTTTTATTTCAGGCTATATATTGTAGCTTAATTTTTATTGCAATTAATTTATTTAACTAAGTAAATAC  
TTTTCAAATA

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**FIGURE 2396**

MFSPDQENHPSKAPVKYGELIVLGYNGSLPNGDRGRRKSRFALFKRPKANGVKPSTVHIACTPQAAKAISNKDQH  
SISYTLSTRAQTVVVEYTHDSNTDMFQIGRSTESPIDFVVDTPVPGSQSNSDTQSVQSTISRACRIICERNPPFT  
ARIYAAGFDSSKNIFLGEKAAKWKTS DGQMDGLTTNGVLVMHPRNGFTEDSKPGIWREISVCGNVFSLRETRSAQ  
QRGKMVEIETNQLQDGLIDLGCATLLWRTAEGLSHTPTVKHLEALRQEINAARPQCPVGFNTLAFPSMKRKDVV  
DEKQPWVYLNCGHVHGYHNWGNKEERDGDRECPMCRSVGPYVPLWLGCEAGFYVDAGPPTHAFSPCGHVCSEKT  
TAYWSQIPLPHGTHTFHAACPFCAHQLAGEQGYIRLIFQGPLD

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**FIGURE 2397**

CTAATCTTCCAGTTGCCCCCTATTGACITTTAAACCAAAGCTTTGATTTCATGACCACTGGGATCCAGCCAGCGGGG  
GATTTCTTTTCTGATGGACTGTACCCAGGATCTCACATTTGCTTAAGCAGCTCCCACAATTGGGTTCTTATAAA  
AGGACACAGAAGAGACAAGCTCAGTTTTCTCTGAAGGAGAAGGACTGCACCTAGAACTGCATTTTGGTGACCTCT  
GAAATTCAGTACGGCAGTGAATGAGCTTCTGACCTTGAGGTGAACCTTAACAAAATTATTTTTGGAAAAATCGTTG  
TGGGAACCATTTAAAGAAGTCCAGGAAACATGAATTCTGGAATCTTACAGGTCTTTCAGGGGGAACCTCATCTGCC  
CCCTGTGCATGAACCTACTTCATAGACCCGGTCACCATAGACTGTGGGCACAGCTTTTGCAGGCCTTGTTTCTACC  
TCAACTGGCAAGACATCCCATTTCTTGTCCAGTGCTCTGAATGCACAAAGTCAACCGAGCAGATAAACCTCAAAA  
CCAACATTCATTTGAAGAAGATGGCTTCTCTTGCCAGAAAAGTCAGTCTCTGGCTATTCTGAGCTCTGAGGAGC  
AAATGTGTGGCACTCACAGGGAGACAAAGAAGATATTCTGTGAAGTGGACAGGAGCCTGCTCTGTTTGCTGTGCT  
CCAGCTCTCAGGAGCACCGGTATCACAGACACCGTCCCATTTGAGTGGGCTGCTGAGGAACACCGGGAGAAGCTTT  
TACAGAAAATGCACTCTTTTGTGGGAAAAAGCTTGTGAAAATCACAGAAACCTGAATGTGGAAACCACCAGAACCA  
GATGCTGGAAGGATTATGTGAATTTAAGGCTAGAAGCAATTAGAGCTGAGTATCAGAAGATGCCTGCATTTTCATC  
ATGAAGAAGAAAAACATAATTTGGAGATGCTGAAAAAGAAGGGGAAAGAAATTTTTCATCGACTTCATTTAAGTA  
AAGCCAAAATGGCTCATAGGATGGAGATTTTAAGAGGAATGTATGAGGAGCTGAACGAAATGTGCCATAAACCCAG  
ATGTGGAGCTACTTCAGGCTTTTGGAGACATATTACACAGGAGTGAGTCCGTGCTGCTGCACATGCCCCAGCCTC  
TGAATCCAGAGCTCAGTGCAGGGCCCATCACTGGACTGAGGGACAGGCTCAACCAATCCGAGTGCATATTACTC  
TGCATCATGAAGAAGCCAACAATGATATCTTTCTGTATGAAATTTTGAGAAGCATGTGTATTGGATGTGACCATC  
AAGATGTACCCTATTTCACTGCAACACCTAGAAGTTTCTTGCATGGGGTGTTTCAGACTTTACCTCGGGCAAAT  
ATTACTGGGAGGTCCATGTAGGGGACTCCTGGAATTGGGCTTTTGGTGTCTGTAATATGTATCGGAAAGAGAAGA  
ATCAGAATGAGAAGATAGATGGAAGGCGGGACTCTTCTTCTTGGGTGTGTTAAGAATGACATTCATGTCAGTC  
TCTTTACCACCTCCCCACTTATGCTGCAATATATCCCAAACCTACCAGCCGAGTAGGATTATTCCTGGATTGTG  
AGGCTAAGACTGTGAGCTTTGTTGATGTTAATCAAAGCTCCCTAATATACACCATCCCTAATTGCTCTTTCTCAC  
CTCCTCTCAGGCCTATCTTTTGTGTATTCACTTCTGACAGAGACAAATCAGAAATGTGTTACATGCTGTGGG  
AACCCCTTTATCCCAGGAAGTCTCTTCTTGTGCTTAACATACAGGACAAATAGGCTCTATTTTATGTCTTGA  
ATTGCCCTTCTAATGTTATCAAACTCATTATTGTGTTACTATTAAATATGCTGAAAACGCTAAAAGTATACGTA  
TTGGTTCTTTATTAATAATTTTTGAAAAATCATTATTCATGATCATGGCATAACAGTATATTCTCTTTTTTTCT  
TTATTTATGACTGTCACAGTGAATAATAGATGACAGACATGTCTGAATGAAGTAAAAATCAATGGAAGACAG  
TCGGGATCTTTTGTCTCATGCAAAAACCTTGGAGTGAAGTCTCAATGATAACTGGGAAATGTTTTCTTCTCTCT  
TATCTAACTATATTACACTTATCCATCAGGTTTCATTGTATTAATCTATCCTTTGAGGTAATA



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**FIGURE 2398**

MNSGILQVFQGELICPLCMNYFIDPVTIDCGHSFCRPCFYLNWQDIPFLVQCSECTKSTEQINLKTNIHLKKMAS  
LARKVSLWFLSSEEQMCGTHRETKKIFCEVDRSLLCLLCSSSQEHRYHRHRPIEWAAEEHREKLLQKMQLWEK  
ACENHRNLNVETTRTRCWDYVNLRLLEAIRAEYQKMPAFHHEEEKHNLEMLKKKGKEIFHRLHLSKAKMAHRMEI  
LRGMYEELNEMCHKPDVELLQAFGDILHRSESVLLHMPQPLNPELSAGPITGLRDRLNQFRVHITLHHEEANNDI  
FLYEILRSMCIGCDHQDVPYFTATPRSFLAWGVQFTFTSGKYYWEVHVGDSDWNWAFGVCNMYRKEKNQNEKIDGKA  
GLFLLGCVKNDIQCSLFTTSPLMLQYIPKPTSRVGLFLDCEAKTVSFVDVNQSSLIYTTIPNCSFSPPLRPIFCCI  
HF

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**FIGURE 2399**

GAAGTGCAGCTGGTGGAGTCTGGGGGAGGCTTGGTACAGCCTGGCAGGTCCCTGAGACTCTCCTGTGCAGCCTCT  
GGATTCACCTTTGATGATTATGCCATGCACTGGGTCCGGCAAGCTCCAGGGAAGGGCCTGGAGTGGGTCTCAGGT  
ATTAGTTGGAATAGTGGTAGCATAGGCTATGCGGACTCTGTGAAGGGCCGATTCACCATCTCCAGAGACAACGCC  
AAGAACTCCCTGTATCTGCAAATGAACAGTCTGAGAGCTGAGGACACGGCCTTGTATTACTGTGCAAAAGATACT  
GAATTAATCCTCTTTCGCGATTCCATAACCCGCCAATTACAGACTCGAATTGACTAC

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**FIGURE 2400**

TTTCCTTTCACACAGCAGCATCATTTATCTGGTAGTAGCAAGACAGCCGTATGACTTTTTGTTGTTGTTAAAGAA  
AAATAAGTTGTCAAGATTTGCCTACCAATAACTTTCTATGTCTTGGCTTTCATGTCCAGTGGGCTAGTTTCCAA  
CTGTTTGAGACTCAGGGTAATCCCAGAAACCTGTGAAGCATCGGCACAAAGGTTGTAGCGCAGATGCCAACAGAT  
GTGTAGGTAACAAACTTGTAAAGCACTTCAATCTCCAGTCTCCGCCTGGCCTCCTTGTTCTGGTGACCACCTTG  
AACCATGAGTATAATACTTGCAGTGAGAGATTTTGTACAAGCTGACGAACCAAGAGGATCAACACAATTCCCACT  
GCAAATTTGGTCAGACCCAAAACCTAACATGTAGGTGGTGAGCGGTGGGATGTTCTGAATAACAGGGAGAGATTCA  
GCGGGCTTGGATACAAGCTGGAAGAAATGGTTGATCCAGAATCCTATGGTCACTCCAGCCCCGGCAGCCAGAATG  
GIGGTGGTGTCCGCCCGGGTTGGGCTGTA

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**FIGURE 2401**

AACGTTAAATTTAGATGTTTTACCTCTAAATGAGGTGAAATTGCAGGTTCCCTCTGGCTGGCGGTGGGGAGGAGA  
CGCAGGGCAGCTTTGGCCAGCAGTGAGCGGACAGACTTAGCGGGAGTAGACTCTGCTTCCTCCAGCCACACCTTG  
GGGACGGAGGCCCAGGACAGTCCCCAGTGCTGGGAGCATCTGGCTTCCTCTCCCTGCACACACCAGCCGGGTCT  
GAACGGCATCAGTTCTAAGTGCCAGGCCAGAGAGAGGCAGCGAGGGACACGGAGTAGAAGAGGCTGTCTGTCTG  
CCACCAAAGGTGACCACCATGTCGGTGAGGTTGCGGTTCTGTCCCCTGGGGACACAGGGGCGGTGGGGGTCTGTG  
GGCCGGAGCGCCTCCTTCGCAGGCTTCAGCAGTGACAGAGCCGGAGGATCGCAAAGTCCATCAACAGGAACCTCC  
GTGAGATCGGAATGCCTGCAAAATCCTCCAAGATGTACGGCAGCTGCGGAAGGGGTCTGTGTGCAGACCCG  
AAGCCCCAGCAGGTGAAGAAGATCTTCGAAGCATTGAAAAGAGGCCTCAAGGAGTATCTGTGTGTGCAGCAGGCT  
GAGCTGGACCACCTGTCTGGACGCCACAAAGACACCAGGAGGAATTCCAGGCTGGCTTTCTATTATGACCTGGAC  
AAGCAAACGCGCTGTGTGGAAAGGCACATTTCGAAGATGGAGTTTACATCAGCAAGGTGGATGAGCTGTACGAG  
GACTACTGCATCCAGTGCCGCTGCGCGACGGCGCCTCCAGCATGCAGCGGGCCTTCGCCCGGTGCCCCCGAGC  
CGCGCAGCCCCAGAGAGCCTGCAGGAGCTGGGCGCAGCCTGCACGAGTGCGCCGAGGACATGTGGCTCATCGAG  
GGGGCCTGGAGGTTACCTGGGCGAGTTCCACATCAGGATGAAAGGCTTGGTGGGCTACGCACGCCTCTGTCCC  
GGAGACCCTATGAGGTGCTCATGCGTCTGGGCGCCAGCGTTGGAAGCTCAAGGGTCGGATCGAGTCAGATGAC  
AGCCAGACCTGGGACGAAGAGGAGAAGGCCTTCATCCCCACGCTGCATGAGAACCTGGACATCAAGGTGACGGAG  
TTGCGGGGCTGGGCTCGCTGGCTGTGGGTGCAGTGACGTGTGACATCGCCGACTTCTTCACGACGCGGCCGAG  
GTCATCGTGGTGGACATCACGAGTTGGGTACCATCAAGCTGCAGCTGGAGGTGCAGTGGAACCGTTTGATACT  
GAGAGCTTCTGGTGTACCCAGCCCCACGGGCAAGTTTTCTATGGGCAGCAGGAAGGGCTCCTTGTACAACCTGG  
ACACCCCCGAGCACCCCCAGCTTCCGGGAGAGATACTACCTGTCTGTCTACAGCAGCCAACACAGCAGGCCTTG  
CTGTGGGTGGCCCAAGGGCCACCTCCATCCTCAGCTACCTGTCTGACAGCGACCTCCGGGGTCCCAGCCTAAGA  
AGCCAGAGTCAGGAGCTGCCTGAGATGGACTCCTTCAGCTCTGAGGACCCCCGAGACACGGAGACCAGCACGTCG  
GCGTCCACCTCAGATGTGGGCTTCCTGCCCTTGACCTTCGGTCCCCACGCCTCCATTGAAGAGGAGGCTCGGGAG  
GACCCCTGCCCCCAGGTCTCCTGCCAGAGATGGCCACCTCTCTGGAGGCCCGTTTGAGAGCAGCCTGGCTGG  
AGGAACTTAGGAGGGGAGAGCCCCAGCCTGCCACAGGGCTCCCTGTTCCACAGCGGCACAGCCTCGAGTAGCCAG  
AACGGCCACGAGGAAGGGGCAACCGGGGACAGAGAGGACGGGCCTGGCGTGGCCCTCGAGGGGCTCTGCAGGAG  
GTCCTGGAGTTGCTGAGGCCCACGGACTCCACCCAGCCCCAGCTCCGGGAGCTGGAGTACCAGGTCTCGGCTTC  
CGGGACCGGTGAAGCCCTGCAGAGCACGGCAGGAGCTACCTCGGCCGAGAGCCTGATAGAGTGCATCCTGGAG  
AGCTTCGCCTTCCTCAATGCCGACTTCGCCCCGATGAGCTGTCCCTGTTTGGGGGCTCCCAGGGTCTCCGGTGA

GTGCACCTCCTTCCAGCAGTGACCCAGTGCCACCCTCCACCGGGTGACCCGAGCTCCACGTTTCCTGCCAGC  
CTCCCCGTCTGTTTCTCCACTGTCTTGGCTCAGCTCTTGTCACCTCTATCGTGACCCCTTCCCCATGCCATCCC  
CGCACATCCCCACTTGCCCTCAGAGCCGGTCTCAGAGACCACGAAGTGGGTGAGATACCCCCAGCCTGCCCCCTG  
AGCCTTCTGCTCCAAGGAACCAAGCTTTTATATTATTTTAAACCTTAAAAATAATCACCAGTATATAGTAGA  
AGTTCTTTGAGGCCAGGCACAGTGGCTCACGCCTGTAATCCCAACACTTTGGGAGGCCGAGGCAGGCGGATTACC  
TGAGGTGAGGAGTTCAAGACCAGCCTGGCCAAATGATGAAACCCCGTCTCTACTAAAAATACAAAATTAGCTG  
GGCATGGTGGCAAGAGCCTGTAATCTCAGCTACTCAGGAGGCTGAGGCAGGAGAATCACTCGGACCCGGGAGGCG  
GAGGTTGCAGTGAGCCAAGATGGCACCCTACATTTAGCCTGGGCGAAAGTAAGACTCTGTCTCAAAAAAAG

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**FIGURE 2402**

MSVRLRFLSPGDTGAVGVVGRSASFAGFSSAQSRRIAKSINRNSVRSRMPAKSSKMYGTLRKGSVCADPKPQQVK  
KIFEALKRGLKEYLCVQQAELDHLSGRHKDTRRNSRLAFYYDLKQTRCVERHIRKMEFHISKVDELYEDYCIQC  
RLRDGASSMQRAFARCPPSRAARES LQELGRSLHECAEDMWLIEGALEVHLGEFHIRMKGLVGYARLCPGDHYEV  
LMRLGRQRWKLKGRIESDDSQTWDEEEKAFIPTLHENLDIKVTELRLGLGSLAVGAVTCDIADFFTRPQVIVVDI  
TELGTIKLQLEVQWNPFDTESFLVSPPTGKFSMGSRKGSLYNWTPPSTPSFRERYYSVLQQPTQQALLGGPR  
ATSILSYLSDSLGRPSLRSQSQELPEMDSFSSDPRDTETSTASTSDVGFLPLTFGPHASIEEEEAREDP LPPG  
LLPEMAHLSGGPFAEQPGWRNLGGESP SLPQGS LFHSGTASSSQNGHEEGATGDREDGPGVALEGPLQEVLELLR  
PTDSTQPQLRELEYQVLGFRDLKPCRARQELTS AESLIECILESFAFLNADFAPDELSLFGGSQGLR

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**FIGURE 2403**

GGATTAGCAAAGGCTTTAGAAAACACAAAAAGACTAATTTGTTGCCTCTGGATGTGTGTGTTATTTGGGCTG  
TTAATATACTTGACTGCTTGTTCAGGACTGGAACCTTTTCTTTTACCTTTAAGATTCCTGCATTTTCATGTGC  
TCATTACAGCTGGGATTTGTGTTTCATAGAACTGGTAGTATTGGAGGTAGAGGAGATACTGTGATATCATATCTCT  
CTCTCTGTCTGTCTCTCTCTCTCTCTCCCACTGAAGAAGAGAAGACAAAATTTAGAGAATTTGAGACTTGCTCAA  
AGTTGTGTAGCTAGTTAGCGATAAAGCTGGAATTGCACCAGATTTGATTTCCATGACATTGCTTTAGCCTGGTGG  
TTCTCAAAGCATGGTTATTGGACCAGCAGCATCCCTTGGGAATTTGTTAGATATGCAAATTCATGAGATCCCAT  
TCCCTTATCAGAAATTTAATACGCTGTGTAGGGTGATTCTAATGCCTGCTAAAACTTGGGAACCACTACTGTGG  
TCTTTACACTATTGGGCAGGGAGATGGGAGACTACAGGTAGATTTGCTGAATTCATGGGCAACACTAGGTTTTC  
ATTTTACCTTATTGTTCTGCCATTTAGATGTCTCCTTTAAACATTTTACTTGCAGTGATGGCTTCCTTAGAC  
TC

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**FIGURE 2404**

ISKGFRKLQKRLICCLWMCVLEWAVNILDCLFQGLEPFLPLRFLHFHVLIQLGFVFHRTGSIGGRGDTVISYLS  
LCLSLSLSPTEEEKTKFREFETCSKLCS

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**FIGURE 2405**

GTTTTGGTTGTGAGTCTTTTAACTTACATAAAAAATATGGAGAATTAGCATATTCACATATCTATTTGTGATGTT  
TATCATACGGAAGTTTTTAAATATAGTAAATTCAGTCTTTCCATTTTTTTTTGTTTATTTAAGAACCATTCCCTA  
GCTAGGGTCATGAATACATTCTTATGAATTATAGAATCCCAACTGGATAGCTAGTTTCCTAGCACCTTTAAAAA  
ATAGTTTATTATTTTCCTCCTGATGTATAAGGCCACCTTTACCAATTTACATATAATGTACGGAATGTTTCTTG  
GCTCTGCATTCTGTTAAATTGGTCCATTTATCTAACTTTGCTTAGTAACCCACTGTTTTATCATTGTGGTATCA  
TAATTGATTATCACAAATGGTAGAATGATTGTCCTCAAAGTCTTTTCTGGTATATATTGATATAATTGTATAGCT  
TTTCTTGGTGTAGTAAAGTACACAGTTAAATTTTCTAACATTGAAATATCTTTTAGATTTTCACTCCAGAATGG  
CAATGTGAAGGGCCCTGTGGACCCACTGTCCTAGGAATTAGCTATAACTAGTGAAAAAT



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**FIGURE 2406**

TTTTTTTGGCTTTTAAAAAGTAAATTTATTACCACACATAATAAGCTCCAGAGAGTAGAGAGATTCCATCATGT  
CATCAAGACCCCATGATAAATCTGTTAAACATTTTGGATTTTTTTTGAAGTGTACACTCTGTTACTCTCAATATA  
TGGGTCTCATACTTTGGCCAGGTTCCTCTGCAGTGCCTCAAAACTCTGTCCCCTGGAGCAGAAAAACCGGGGCTG  
TATTTTACCCAAGTTGGCTCTGCCCTTGCACTTTTTTCATAATTGTCTCAGGATTTAGGACAATAGCTGCAGGTAG  
GAAACAGGGAGAAAAGAGCAGTTGTATATAGTCCCTTGGGTTTCACAGCTCCTCAAAGAAACAGAGAATTAATTA  
CATGGTAGATCTACCCTATTACTGGATCCCAAGAGGGAGCCATCACCAGGCCGTCTATTATTGCTGCTCCTACGT  
CTTGTAACCAATAGCAAGCATCCTGTTCTCAGACACTAAGTTGGGTTTGGAGACCATGAGTGTATGGAGACACG  
ATGTCATAAATAATAAAGCTTGGGAGAATGTGGGGCATCGATCCCACTACCTTCTTGATGCTAAGCAAGCGGCT  
CTACCACTTGAGCTAAATTCCCCCACATCAGGGCAGCATTATTTATTGGTTAGCGGGTGGCCTGGAAACACAGGT  
GATTTTCAGGGCCTTCAGCAGGAAAGCAGGGCTCCTAAGAGCAGATTTTCTTCACTTGATGGGCCCAGGGCAAACA  
GCAGTGGCTACTCATTGTCTGCAAAGAAGGAGGAGAAAAGGGAAACAAGGAGAAAGTCACAACGGGAAAACCTTCAC  
GCTGCCAAAATGCCAAGTTTAGAGTATTCCGGGACAGAAAAGGGCACGTCTAGCAAAGGAGGACCTGCCTAGAC  
ATGCCCAGATAACTCTATTTGAAAGCCTTGACACTGCGGATGAGAGATCTCTGGAGTGTGTGCAACCCAGTGGTC  
AAGTGAGGACTGGAAAGTGGGCCATTGCACAGTTCAAGCTCTCAGGCTCTTTTTAGGTAAGTTGTTGGGATTAG  
AGCCACTTATTACAGCTGGCAGGTGCGTCCACAAGCTCATGAACAACCTTATGGTTTTGCTTTCTACAGTATCT  
GTCCAGGCACATTCTAGTTACTTGACACATCTTGGTTTCAGTCCTCTCACCAGAAAGCTGGGGCTGTATTTAACC  
AGGTGGCTCTGTCTCCACTTTTCACAATTGTCTCACATTTAGGACCAAGCTGCAGGCAGAAACAGGGAGAAAAG  
AGCAGTTTTATATGTCCTTTGGTTTCACAGCTCCTCGNAGAAACAGNAAATTAATTACACAGTAGATCTACACTA  
TACTGAA

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**FIGURE 2407**

CAAAATTAACTTAGACTTTTTGAATTTATTAGCTGTTTTGTGAAGATTAAATTTAGAAAGCTAAAATTAAACA  
CTGAAAGTAAGTTACTTTATTCCATACGGTCTCTGTCCAGTTTTAGCACTAAAATCAGTTCAAGGATGCCAATCC  
CTAATTGGCCAAATAGCCTTACCATTCTTGTTTTCTTCTCCAAATTTGTTTTTTTGCTGGTCAGATTA~~AA~~CTTCCAA  
TCTCTAAAAATTCTGAAATGATAAATTTTTATGATACAGCATAGAATAATATGTATGTGGAGACTTGAAGGAG  
TCAAATCTCAATGAGCCTTTTGTAGGGCTTAACGATTGTTAAAAGGGGGCCAAAAGGGCACTAATTTTTGGAAAG  
TGTATGTTTGTATGGTGGTGAATGTGTAGAGAGGGTGAAGTAAAGGAAAAGTAGAACAAGAAGAAAGAAAA  
CTGATAGGTATGACGATGAGAGAGAAAGAAAATGGGAAGAGAGCGCAAGACGTGCAGATTTAGAAAAAAGGTTGA  
GGGAAACATATTCAAAGGGAAAAAGAAAGCAGGGGGAAAATACATTAGAGGTGTTGAAATTAGTAGGCACTCAC  
AGAGGTGCTAATCGAGAGTTCTGTTGGGCTCCTGTCATGCTGCTATTAAAGAGCATTAGCAGCTAAGAGATCTAA  
ATTCTAGTCCTAGTTCTTTGTGTTGCCGTGGAGAAGTCAGTTAACTTACATGAGGCTCAGGTTCCCTTACCTGTGT  
GTAAAATGGGAACATTGAACTAGGTGATCTTTAAGATCCCTTCCGGCTCTAAAATTGTTTGACATTATCTTGGTG  
GTCAGTAACTGTGAGAAACACATTCTGAGGAAAATTTGCAGCTATAGTTGACTTCAGGACAGCATGTTTAGGGA  
GTAGAATGTAAGCTCCCTGAGGGTAGGGGCCTTTTCTGTTGTGTTCACTGCCATATCCCCAGCAGCTAGCACAAAT  
GCGTGTTACATAGTAGGCATTCTTAAATGTTTGTGAATGAATGATGTGAAAAGTATGTTGATGGTTTGTTAGG  
AGCACACCTAGAAAGCCTCAAAGAAAAATGGTGTGCTTTAGGGAGGGAAAAGACAGATTTCTTCTGAAGAAATCT  
TAAGCAAGCTGATTTTTAATCCTTATTCTTCTTATTTGTCCCAGATTCAAAGAAAGTGGCTTCAGCTAGTGAC  
ATTCTCATAGTCACAAAACCTTACGGTGACTGTAGACATACATAAAAGTGTACATGTAATCTAGGCCAGTTCCCTT  
TAAGTATCTTACAGAAAGGCAGGACCAAGCTTAGGTCTCCATGGAATCTGAGTGAAGTATATACATGGAATAT  
ATTAGTTATATTGAATTAGATTGATTGGATTAAAATTCATTGAGTGAAGGCACAGTTAGTCTACAAGNCTGAG  
ATACAGGCTGCCAAATTTAAGAT

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**FIGURE 2408**

KLNLDFLNLLAVFVKINFRKLKLNTESKLLYSIRSLSSFSTKISSRMPIPNWPNSLTILVFFSKFVFLVLR

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**FIGURE 2409**

CTTGAGTACTTTTAATTTGCCATGCACAACCTTTAAATTCTTTTTTCTATATGTCTCAGACAGAATAGATGGAGT  
GTGCAAGGATAGATGGTGAATATGTATTTTGGTAAATTTGTAGAGAAAACGAAGAAAACATATAATTCACTAAAT  
AATGATAATATCCAATGTCTGTTGGGGGCAAAGAGCCTAGAATGGACAAAAGTAGTATGTAAATTTAGAAGGGTG  
GGAGATCAGATTTAAGGCATCCTGAGGTCAAGGTATATTTGGAGAAAAAAATACTATTTAACTTCGTTTCAGAA  
GAATGACGTAGAGTTTTAATTAATCAATTCCAAACATGTAGAGGGAGAATTAGGATGGGGAAGAGAAAAAGTACA  
CCCAAAGGAGGTAGGAAGGGTGAGTGTAACAGGAAAGGCAGAATGAATAGAAAGGATAAATAGAAATAAGAGA  
GTGGAAATAAATCCAAAGAAGTAAACAAAATAAAGGAAAAAAAATCTGAGCATGGTG

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**FIGURE 2410**

LSTFNLPCITLNSFFLYVSDRIDGVCKDRW

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**FIGURE 2411**

CTGGGACATCTTCATCCTTTTTGTCCCCATGACCTTCCTTATTTATGCTAATACATTTCCTTCCCTGAGTTCCT  
CTACACTACCTATCTCTCAAATGGCAGCAGGGTCAACATCACCATAGTCTGCTATTCTTTGATAACTCCATTTAT  
GCTCTCTTTGAAGTTCACCTTCIGGCATTATCACTTTTCATTTCTTTGCTGCATTTTATCTTTGTTGGCCAGTTC  
CCTCTTTTCGTGATACATTGTTGTAAATCTCATGGGAGTTAGCCACCTGGAGACAGGGAGGCAACAGAACTACA  
CACTTTGCTGTCTGTGCATAAATTGAAGAGCAGAAGCTCAGTGACCAATCACTGATGGACTTTGAAAGGAGTGAC  
AGTAAATTGGCCCTCAATTATGATGCTTATCTTTTATTTATGTGCTGATTCTAGACTGAAGAGTTAGCAACAAAG  
TTTATACCATATGCAACTACTCGTGATCAATATACCAAGGTACTGAAAAAGAACCATGTCCTGGGCTACTAGTG  
TTATTTAACTGAATCATGCAGAGTGAGGGCTGCCTGTATTCTTGCCTTTGTTTTCTAGAACTGAAGCATGGAGGG  
TCAAAATATGCATCCAATGTTATTTAGAGCTGGAATTTGAATCCATGCAGTTGGGTGCAGAGTCTGAGCTCTTAA  
TCACCTTGACCATTACATTACCTTGCTTTTTTATTTCTTTGGGGAAATGTTTCTAAAAAATGTAACGCCCTCT  
GTGCTGCTATGTGGGAATCAGAAGTCTCAGTGCTGAT

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**FIGURE 2412**

WDIFILFVPMTFLLIYANTFAPPEFLYTTYLSNGSRVNITIVCYSLITPFMLS LKFTSGIITFHFFAAFLSLLASS  
LFS

2653/2682  
**FIGURE 2413**

CAGCCATGGCTTTGCTGCAATACTCTGGGCCATTATCGGTTTTGGTTTTTCTGGGATTCCCATAACTGCAAAGC  
AAAAAAAAGGTTTTTTAACATGAGCTGTAGCTTCCCCTGTTTGATATGTGGCCAGATAAAATGTGAATAAATAT  
CTACTGAAACATGAACAAAGGACAATTTTCCAAAAGTGGGAATGTGTGTTATGTCCATCTGACAGATGGAATTTG  
GAGATAGACCTCTAGGGTTAACTCCTGCTCCCTGATGTGGCAGATGCAGGACTTCACCGGCAGAAAAGTGTTTTA  
CAATCTCCTTAACCTGCTTCCAGGATAAGCCGATCTTTTTCTGAGGCCTGCAGCATTAAAGATGGGTAAAGCAAT  
GGAACGTTTGTGCATCGGCAAAAGCTGCAGAAACCAGTGCATCCGCCCTTTGATTAAAGTTAAAAGGACCAGGGAG  
GTTAGTATGTGCTCTCATATGAGTAATATAGAAAGGGAATGTCTTTGTTGTACTGCTTGTGTAAAGAATGAAA  
TAAAAGATTAAAGTTGTTCCACC



2654/2682  
**FIGURE 2414**

ACAGCCGAAGGGAAAGCAGCAGGTTGGGGCTTCTTGTGGCCAACTTCAGAGCCTGTCACCAGGAAAGGTAAGCAT  
GGGAGGAAGGAAGATGGCGACAGATGAAGAAAATGTCTATGGTTTAGAAGAGAACGCTCAGTCCCGGCAGGAGTC  
CACGCGGAGGCTCATCCTTGTGGGAGAACAGGGCCGGGAAGAGCGCCACTGGGAACAGCATCCTGGGCCAGAG  
ACGGTTCTTCTCCAGGCTGGGGGCCACGTCTGTGACCAGGGCCTGCACCACGGGCAGCCGAGGTGGGACAAGTG  
CCACGTGGAAGTCGTGGACACTCCGGACATTTTCAGCTCCCAAGTGTCCAAGACAGATCCTGGCTGTGAGGAGAG  
AGGTCACGTGCTACCTGCTCTCGGCCCCCGGACCCACGCGCTGCTCCTGGTGACCCAGTTGGGTTCGGTTCACCGC  
CCAGGACCAGCAGGCGGTGAGGCAGGTGAGGGACATGTTCCGGGAGGACGTCCTAAAATGGATGGTCATCGTCTT  
CACCAGGAAGGAGGACCTGGCCGGGGGCTCCCTGCACGATTACGTGAGCAACACAGAGAACCGGGCCTTGCGCGA  
GCTGGTGGCCGAGTGCAGGGGCGGGTCTGTGCCCTTTGATAACCGGGCCACCGGCCGGGAGCAGGAAGCCCAGGT  
GGAGCAGCTGCTGGGGATGGTCGAGGGCTTGGTGCTGGAGCACAAAGGGCGCCATTACTCCAACGAGGTGTATGA  
GCTGGCGCAGGTGCTGCGCTGGGCAGGCCCTGAGGAGCGGCTCCGGCGGGTGGCGGAGCGCGTGGCAGCCAGGGT  
GCAGAGGAGGCCATGGGGCGCCTGGCTGTGCGCCCGCTGTGGAAGTGGCTGAAGTCCCCAGGAGCTGGAGGCT  
GGGCCTGGCCCTGCTGCTGGGGGGCGCGCTCCTGTTCTGGGTGCTGCTCCACAGGCGGTGGTTCGGAGGCCGTTGC  
GGAGGTCGGGCCCTGACTGACAGCGCAGGTCCTAAACTGAAGGCAACTTGGTTAAGGGAGGCTGAATTCTTGGAG  
CTGAAGGGAAAACATTCATTCCAACGGAAGGAATCCTGTAGTTTCAGGCATAGTTTTAATGACACAGAAAACCTTG  
CTGCATCACCTTTGCAACTTTGCCAAAGCTCAGAGTTCACCT

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**FIGURE 2415**

MGGRKMATDEENVYGLEENAQSRQESTRRLILVGRGTGAGKSATGNSILGQRRFFSRLGATSVTRACTTGSRRWDK  
CHVEVVDTPDIFSSQVSKIDPGCEERGHCYLLSAPGPHALLLVTLGRFTAQDQQAVRQVRDMFGEDVLKWMVIV  
FTRKEDLAGGSLHDYVSNTENRALRELVAECGGRVCAFDNRATGREQEAQVEQLLGMVEGLVLEHKGAHYSNEVY  
ELAQVLRWAGPEERLRRVAERVAARVQRRPWGAWLSARLWKWLKSPRSWRLGLALLLGGALLFWVLLHRRWSEAV  
AEVGPD

2656/2682  
**FIGURE 2416**

TTTTTTTTTTTTTGTAAACATATAATTTTTTTTATTTTGAGCGTGACACTTCTCCACTAGATAGCAAGGAAAAGT  
GGTAACAATTACACATTACACAAAAGTACTGTACCATTGCCTTTATCTTGAAGGTTTCGGAAGCCTCTACAGTTA  
ATAAGTTAAATAAAGGGCTTGAGTACATAAATATTTGTCTAGGAACCCTACCGTATCTACAACACAGTAAGAATC  
TACGGGAGGACAAACTTTTACCATAACCACGCTGAGTGCAATTGCGTTATAACATTTCAAATATACAAAGCTCTGT  
TCTTTTTTTTTTTTTTTAATAACAATGGTATGTACAGAATCAATAATCACAGTTTGGTGACTTCAACAGTCCAT  
ATTCTAGCAGAGTATTATTTCCCTTTGGTTTGATATAAAAACCTTGGTTGGTGTATGATAAAGAAGAGAACAAGA  
ACAAGACGCCCCCTTTCCTTTAAGTGCCTGTAGCTATCTTACAGGCTCGCATTTGCTTCCCGGGCCCTGGCTTC  
ACGCTGGGGCCCTCGCTGGGGAGATCAACTTCGAGCGCCAAAATGCTATTTAAAAAAGAAAGAAAGAAA  
GAAAGAAAAGAAAGGCTAAGTGGGGTGTGAGGAGGAAGAGGTTGGGCTTTTTAAATTTTTTACTTCAATATCAGG  
CGTCTGGGGGAGAAAACCTCCCCGATATTTTCAGGAAAGTAAGAACAAGAGAGAGTGGATGTTGGAGTTGGAGCG  
AGGTTGGCAGTAGCAGGGGCAGGGGCAGGGGCGGGTGGACAGCCAGCCGAGGAGGTGCCACGTCCCGGAGCGCCG  
AGGGCTGCCATGCCCGCATCCAGACTGCTGTGAAGGCGGCTGCGCTCTCTCAGTGCCGTCTCGGGAGTGTGCTGG  
TCCTCTGTTTCCATTTGGTCTTGAGTGGTGTGAGTGAGGTGACCTTTCGGGGCGCGCGGGGCGCGGGTGTGG  
AGGGCAGCCTTTAGCACACCTCCTTGCCCGTGCTGGTGCCCGGCAGGATGTTGAGCTGCGTGAGCTGCGCCGCT  
GCTCCTTGGCCTTGAGCCTCAGCGCGGCTATGCTAGAGGCGCGTCTGTCTGCGGCCGC

2657/2682  
**FIGURE 2417**

GGGAAC TTGAGG TTTAAAGCAGGGGGAGGAGGGCCGGAATGCTCCCCGCCGCCCCGACACTCACTCGCCCCAG  
GCCCCATCCTAGCCCAGGGTCAGTGTCATTCCCTTCACCTTAGCCTCTCACTGCCCAAAGAGGCTTACTTTTCTT  
CTTTAAACTGCTGT TAAAATTTGGGAGGAAACGGAAGCAAGGGCACCTGATGGTTTCAGTGCAGCTTCAGGTTAG  
AGGGGCATTTGAGGTGCCTGAGCTGGGGGAGGGCCTTCCCCCTGAGGGACTGGGAGAAGGGTAAGCCATGTGCCC  
TGGAAGCACTGCAGGGAGCCTCAGATTTGCACCCCTGGCTCACACTCGCTGGCGCCAGCCAGCATGGCAGGGAT  
GGGCGGGGCTGGTTCTTAGGTTTCCTGCTCTTTGGGTGCTAGCACCCAGGGTAAGGAGACACCCATGTCCGGTTG  
CAAGACAAACCTTTCTACCTCCTTTCTGCCAAAGGCCACCAGCATCCTCTGCCTCAATCTCAATCTTTGGACCT  
TTTAGCTCCAAAGTGGTTTGATGACCACAGGCTAAAATTCATAGTCTTAAAATTTTAGATAGTTAAGAGACAGA  
TCTGTTACAGGTTTTCAAATAAACTGGTCTATCTAGTGT

2658/2682  
**FIGURE 2418**

MVQCSFRLEGHLRCLSWGRAFPLRDWEKGKPCALEALQGASDLHPLAHTRWQPAWQGWAGLVLRFPALWVLAPR  
VRRHPCPVARQTLLPPFLPKATSILCLNLNLWTFAPKWFDHRLKFIVLKE

2659/2682  
**FIGURE 2419**

CACTGCACTTTCAATAAGGCATTTTAGGATTTCTAAGTTATGTATGGTAAACAGCTGGATGAAAAATTCAATTGC  
ATTGTTTTTCCAACTTACAGATGATTGGTATAAAGAAGGTTAAGTCTTTAGATAAGTAATGAAAATGTTTGCTT  
TACACAAAGTAGAGACTATACAATGTTTTATCTCAAGATGTATTGATGTACTGAAAAATGCATTTTAAATTTTT  
TCCAGAAACTACTGAGTTACAAAAATGGGTCATCGTCCCACTTTGTTACACAGTGGAAATGATAAATCTAGGT  
AGGATTTTATGCCTGAAAGAGAATCTTAAATGTGTCACTACATTTTGTTCAGATTTAGAACTCAGGTTCTTG  
GAGACTATGAAATGTGTCCAGAGTCACAGAGCAAGAAAGTGGCATAGCTAGGACTACAAAACAACCTTTTCAAAA  
TCCTGAGACTCTCCCAATAGTTTATGAACATGTATTTATGTATTACATATTTATTATTGAACATGTATTTCTGTG  
TCTTGCAGTCACTGGTTTTTGAAACAGAATTAAGGGATGAATAGGATATAATGTCTGCTCTCAAGGAACCCAGTTT  
CAATTTCTATGTCTTTTGACACAGTGCCTAGTGGTAAGATCAGGAGAATACCATGAGTATCATGTGCCTTCAGTT  
CACCAAGACATGTAAGAAAAAAAATTAATTATAGTCACATGACCCAGATGTAGANATATGAGGTCAAGGAGGG  
CTGGATTATGTAGCTCATTACCATTATCATTAAATGTGTAT

2660/2682  
**FIGURE 2420**

TALSIRHFRISKLCMVNSWMKNSIALFFQTYR

2661/2682  
**FIGURE 2421**

ATCTTAATCCTCACAAATAGTGCCCTAAGGAAGGTATTAGTATCCCCATTTTACAAAGGAGGAAACGGGGAACCTG  
GGGAGATTAAGCGAAGGCCTCACAGATCATGAAATAGAAGAGGCTGGAAACCTAGTCTGGTTCAAGGGTGTGCTCT  
TTCTGCTCTGCCATGCTGTGCTTCAGCCCTTCCCCACTCTCAGCCCCATGTGCACGCAGATAGGGATTTTCACTC  
TTTGCCCTGTATGAAAGGAGGGAAGGTAAGACACATGAGCCTAGGGGGAAGGTCCATCTGCAGGACTACCCTGAA  
GGGGATGGGACATTCCCTGGCCCTCAGCCTACAACTCTTTCCTTTTATTTCTGCTGGTTGAAAAGCATAATTTAA  
AGATGACTTTGTTTTATACATACACATACTCATNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNCAAGATA  
GAGGGCTCTCTGTAAATAAATAGACCTGTCACCTATCAAAGATGCTAACCAAGGACTTACCAAATGTCCTTTGAT  
GCTAAGTATCTTTCAGAAAAGTTATTACTCAACCTGAGTCACGGAC



2662/2682  
**FIGURE 2422**

MNRRGWKPSLVQGCALSALPCCASALPHSQPHVHADRFHSLPCMKGKVRHMSLGGRSICRTTLKGMGHSWPSA  
YKLFPFISCW

2663/2682  
**FIGURE 2423**

GGCGTGAGCCACCATGCCCAGCCTGTCTGCTGTTGCTTCAGCTCAGAAAGTCCTGGCAGAACTGGTCCACAGGGA  
GACACAAGGGCCACCCAGACCAGGGGTGGAGGCTTGAACCTTTGGCAAGCCACAGTCCTGGCTCCAGACTATGCTG  
TCTTGCTCCTTGGAGCACTCATGTGCTCGAACTTGGCCCAAGGAGTACTAAAGCCTCCCTGCGCCTTGCAGGCAG  
TTCAGTCACCATGGAGACCCTGTGTATTCTCAACCCAATATGCCTGATACTGATTGCCACCAGAGCTGAGCCCAT  
CTAGGCTCAGGAGCTTCAAATGATGGCCTTGGCCCAGACCATCAGTGICTCGCTTATATCAACTTTTGGGTTCTC  
AACTGGAAATAAGCAAAGCCTGCAGATGACTCCAGCAGTAACTCACCGGAAGCCTCCTTTCAGCCGAGGTTGACA  
TCCACTGTTGGCTTTATAACCTTCCTACTGATCATAAACCAAAATGTGATGGGGAGCTAGGACTCCTTCACCTCTC  
TTCCCTTTAGTAGTAGAGATGAGCCTTGGTGGAAGCCATTTGAGGGTTTATTTAGTCATTTCTCCATCGCTGTG  
GGGACCAGAGTCCTGGCGGGAAGAGGAGGGCCAGCTCTGGGAATCTGTTGAGAGGCAGCTTTTCCATTGT

2664/2682  
**FIGURE 2424**

REPPCPACLLLLQLRKSWQNWSTGRHKGHPDQGWRLWQATVLPDYAVLLLGALMCSNLAQGVLPKPPCALQAV  
QSPWRPCVFSTQYA

2665/2682  
**FIGURE 2425**

CTCTGCGCCCCGTCCTCCTTTCCGGCCGCTCTCTCTCCTCTCTCCCTTCTCACCCTNGATGGGTGGGGGGTGAT  
GCTGGCGGGGGCTGTAAACCCGCCCCGCGTGTGTGTCCGANGNGGGTNNGGTNANGTAANGTNGNGTNGGAGGN  
ATCGCACGGCGCGGNCCTCTGGGACGCTGGAGTTCAAGCCTCTCCCAGAGGCCGCTGGGGGCAGGCCTCGCCTCG  
GGAGCCCCGGGTCTTCTCCAGAGCTGCTCCGGCTCTCCTCGGCCCCGCTCTCCTTCCCCTACTTGGCCTCCCCTT  
GGTGTGTTCACTTGGAAGCGCCCGAGCCTCGGAGGCACCCACTGTTCTCGGGACGCGGCGTAGGCAGCTCCAAC  
ACTTTGAGCCCCGTCCTTGTCTGAAGCCTGCAAGTTTGTCTCCCTTCTGGAGTGACATGGTCGGCGACCAAGCGCGG  
GACCCAGGCTGTGCGCGCTGTGCCTGCGCCCTGCGTTAGAGGCTCGGTGTCTGGTGTGTTACAGGCTTCTTACC  
GTGTCTGTCTGAGGGGCGTGAAGTTCCTCACTGTACCGCGCCCAGCTGCTACGAGGAGAGACCGAGATCACGGGC  
GAGGCGGGTGTCCCTGGAGGGGGATCTCTCTTAAGCGCTGCTCGGCAACACAACCCCTCCGCCCCCCCATCCTT  
CTCACTCCGGGGGAAAAAGCACTTGCTTTCCCAGGCAAATTTTCGGG

2666/2682  
**FIGURE 2426**

SAPRPPFRPLSLLSPFSPLDGWGVMLAGAVTPPAVCVRXGVXXXVXXEXSHGAXSGTLEFKPLPEAAWGQASPR  
EPGSFSRAAPALLGPALLPLLGLPLVCSLGSARASEAPTTLGTRRRQLQLL

2667/2682  
**FIGURE 2427**

TTAAGGGTACACAGTGTACCTAACATAATATAGGGTTATGAGCAATCTCACATATAGCTAATACAGTGTAAC TTC  
CAGAGGACAATTTACACAATGTATTTATTGAAGCTTCCAAAATGTTACACACTTTTACACAGATGCTAGCAGT  
GTATACTAAATGCCAGACACCAAAGTAGGCCCTTCAACCACAAAGGGTTGCTTAATTAAATTTACAGTTTGTGA  
ATCTCATGTTTTGTATTACAGACTAAGTATCTATTAATAATACAGCAGAAACACAATTTATTGACTCGCAAAGA  
TGCTGTGTAAGTTCCAAAAGCAAAGAAAAATATAAGCGAAAACGATTCAACTTTTTGTAAGCATATACTATAA  
GCAAAAATACACAGAAAAAACCTGGATGAACCTGAATAAGATTATGAATGATTTTTGTCTTATATTTATTACT  
TGTCTGTATTTTCAAGTTGTTAAATAAATATTAATTACAAAATAAAAAGGTTTTTTACACAAAACATTTAAAA  
TC

2668/2682  
**FIGURE 2428**

GGCACGAGGAGACATCACATGCCCCAGTCTGATGCACCACGGAGTCGTCTCTGATGTATTCTTGTCAAAAAATG  
TTTGCCCTGATTCTAATCATGAAAGAACAATTAGAAAAAATCCAAATTGACAGATATTCTGCAGAATAAATGGCCT  
GACCTCATCAAAAACATCAATGTCATGAAAAACACAAAACATTGCAGATAGCGTGAAATTAAAGATTACAGAGAT  
ATAATTTAATGCAAGATCTCTGACTGGATCCTAGACTGCAGGAAAAAGTCTGCTATAAAGAACATTGGATCACT  
TGTAGTAGCTGGGAAATAAAACAAAACATTATTTGTAAAAGGGGGGAAATCTGAACATGGGTCTTGCAGTATTTA  
TGACAGTTTTTGCAGGGCAGAGATTTCTAGATTGACAGCTGTTTTAGTACTTTCAAGGTGATGCTCTGTCTGCTG  
GTTTGCATTGTTTTCTGTCTGAGTTAAGAGACTGGCAGAACACAGAGTTGCAGTAGCCAAACACTGGAGAAAGCTG  
GGCCCTACAGAAACCTAACGCTGAAGAAACCTCAGGAGCCAAACTGGTGGAGAAAACAAAGAGTCCTCCCTCTCT  
CCCTTTTCAAATAATGATCATACTCTTCAAGCTGTCTGAAATGGTTAAGGAGTTCAGTCTGTCTGTCAGGCACAC  
CCCCAGAGCCAGCCTAGCCACACAGACCCNNTCAGAGCCAAACCAGCAAGGAGAATTTNATTTTCATNTTCCNCC  
TTGAAAGGACTTCTAGGTAGGGAGGGAGACCCTTTAAC

2669/2682  
**FIGURE 2429**

GCCGCTTTGGGGGCCGCGGTCTCTCCGCAGCTCGCGGGTCACATGGCCCGCCTGAGCAAGGGGAGCCCTGCGCCT  
GAGCTGCGAGGCGGGAGGAGGTGAGGCTCCGGCGCACACCCAAACCGCGCTGCGCCCGCTCCTTCCGGGCCCCGG  
AGATGGCGCCTCCACCGGGATGAGCTAGCCAGCCTGGGCAATACCAGAGGCGGCCCTCGGCGCGCGCAGGGGACC  
GAGCTGGTCGCCCCAACCGGGTTTGATTTCTGATGACTCTGGCCTGAGTTCCAGGATGGTTTTTCTTGGGACCA  
GACATGAACAAAAGTTGACCTCATGAGCACTTCAACCTCTCCAGCTGCCATGCTCCTCCGGAGGCTGCGGCGACT  
GTCTTGGGGCAGCACTGCTGTCCAGCTCTTCATCTTAACAGTGGTGACGTTTGGCCTGCTGGCCCCCTGGCCTG  
TCACCGACTTCTACACTCTTACTTCTATCTGCGCCATTGGCATCTGAACCAATGAGCCAAGAGTCTCTGCAGCA  
AAGCTTGAAAGAGGGTGAGGCTGCCCTCCACTATTTTGAGGAGCTTCCCTCTGCCAATGGCTCAGTGCCCATTTGT  
CTGGCAGGCCACCCCCGGCCCTGGCTGGTGATCACCATCATCACTGTGGACAGGCAGCCTGGCTTCCACTACGT  
CCTGCAGGTTGTGTCCAGTTCCACCGGCTTCTTCAGCAATGTGGCCCCAGTGCGAGGGGCACCAACTCTTCTCT  
GTGCAACGTGGAGCGTAGTGTGAGCCATTTTGATGCCAAGTTGCTCTCCAAGTATGTCCCTGTGGCCAATCGCTA  
TGAGGGCACTGAGGATGATTATGGTGATGACCTTCGACCAACTCGTTTGAGAAAGAGAAGCAGGACTATGTCTA  
TTGCTTGGAGTCATCCCTGCAGACCTACAACCCAGACTACGTCTGATGGTAGAAGACGATGCTGTACCAGAAGA  
GCAGATCTTCCAGTCTTGGAGCACCTTCTGCGGGCTCGCTTCTCTGAGCCACATCTCAGAGATGCCCTTTATCT  
CAAGCTGTATACCCCCGAGAGGCTCCAGCACTACATCAATCCAGAGCCCATGCGGATCCTGGAATGGGTGGTGT  
AGGCATGTTGCTGGGGCCCTTACTAACCTGGATATACATGAGGTTTGCCAGCCGCCAGGGTTTAGCTGGCCTGT  
AATGCTCTTCTTCTCCCTGTATAGCATGGGTCTGGTGGAGCTGGTGGGTGCGCACTATTTCTTGAACTGCGGCG  
GCTGAGTCTTCCCTGTACAGTGTGGTTCTTGCCTCTCAGTGTGACCCCGAGCCATGCTCTTCCCGGCACCTGC  
GGCCCGCCGACCCCTCACCTACCTGTCCCAAGTGTACTGCCACAAGGGCTTTGGCAAGGACATGGCACTGTACTC  
GCTGTTGAGGGCCAAGGGAGAGAGGGCCTATGTAGTGGAGCCGAACCTCGTGAAACACATCGGGCTCTTCTCCAG  
TCTCCGGTACAACCTTTCATCCAGTCTCCTCTAGGGTGCCAAGAGATGCCTTTCTGAAGTTGGCCACTTCTTGAA  
GATTCAAATATTTATCTCTTTATTTAGACATGGTTGCCTGCAGGTATTTCACTGTTTACTGTTGTTAGAGATATA  
GGCACTGGGGCAGCTGAGGAACCTCAATATGTTAAGAGCCTTGGCTTTGGTAGCCTCCTGGCAGGAGCAGCAGTT  
TGCCACAGGTCCGGACCTCTCCCTCCACACAGCCACACTGCCTCATGCAGTCTGACCCACCCAGTGAGGGTGCAT  
TTGAACACTGATTATATCTCCATTTGTTTTTAAGCTCTGCTTTGTGTTAGAGCTTGTGACTGCCAAAAATTTTG  
TGCACAGTGATATGACTGTTTtaggatCTTAAGGGTAGAATTTTGTGAAAGGTGAGATCCTTTGGAATTGAGTTC  
TTTCTCATTGGGTATGAAAATGGATGTATGTTTGAATATATGCCCAACGAGGCAGGACCATGTGGATAGATTCC  
ATTTGTTTCTTGACCTGATGTAATAAAAAGCTGATAAAAGCCGTGCAGTCCCCGGCATCTTGGAATAAAAAAAAAA  
AAAAAAAAA



2670/2682  
**FIGURE 2430**

MSTSTSPAAMLLRRLRRLSWGSTAVQLFILT VVTFGLLAPLACHRLLSYFYLRHWHLNQMSQEFLOQSLKEGEA  
ALHYFEELPSANGSVPIVWQATPRPWLVIITITVDRQPGFHYVLQVVSQFHRLLQQCGPQCEGHQLFLCNVERSV  
SHFDAKLLSKYVPVANRYEGTEDDYGDDPSTNSFEKEKQDYVYCLESSLOTYNPDYVLMVEDDAVP EEQIFPVLE  
HLLRARFSEPHLRDALY LKLYHPERLQHYINPEPMRILEWVGVM L LGPLLTWIYMRFASRPGFSWPV MLFFSLY  
SMGLVELVGRHYFLELRRLSPSLYSVVPASQCCTPAMLFAPAARRTLTYLSQVYCHKGFGKDMALYSLLRAKGE  
RAYVVEPNLVKHIGLFSSLRYNFHP SLL

2671/2682  
**FIGURE 2431**

ATGGTATAAGATTAAATATATTAGTTATGAAAATAATTGTAAATGGCTTATTGAACTTATAGTCAGTAAAAATCA  
TGTTTTTGAAAATTATGTAATGACTTTGAAAATACCAGCAATATAATGTAAAGTGGGGAAAAAGCAAGTTACT  
CCTCTGTAATACATATGATTTTAGTTTTGTAATAAAAAATCCCAACCATATATGCACTTATAGGGAAACAAAGGA  
CCCATCGCAAATGTTTTCCATGCTGATCICCAAAGTGGTGAGTTTATGTGTGATTTTTATTTGTTTATGCTCTT  
CTGTATTTCCGAATTCATACAATAAATATCTGTACTTTTACAATATG

2672/2682  
**FIGURE 2432**

WYKIKYISYENNCKWLIELIVSKNHVFENYVMTLENTSNIMLSGEKSKLLLCNTYDFSFVIKIPNHICTYRETKD  
PSQMFSMLISKVVSLCVIFILFMLFCIFRISYNKYLLLLQ



2674/2682  
**FIGURE 2434**

MTVILFTQLTAPMAVILFTQLTAPMTVILFTQLTAPMAVILFTQLTAPMAVILFTQLTAPMAVILFTQLTAPMAV  
ILFTQLTAPMAVMIVTMVTIVALMV

2675/2682  
**FIGURE 2435**

AAGCAAAATCAATCACGTTATTTTCAGCTCCGTTTCGACACAGGAAAAGGAAAAGAATGCACATGCCAAACAAGAA  
GAAATTTGGTAAGAAAAGATTCAAGATATGGCCTTTATACACTAATTATTCTTAATAATTCATAAGTCCTTCTG  
TCTTACCTAATTTCAATTTGTTTAACAGTAAGACTATATATACATTCAACAAGAATCAAACATATGCTAGCAGATA  
AGACCGAAAGACTTCTTCAGGGCTCCTTCACCAAAAAAGTGTAGCATCCGACCAAAATTTCAAGAGAATATACTAG  
GCTTTCTTCACCATAGACCATCCACATTCTGAATACCTGTGACTTCATTCCGTAAAGCATCTCCCAAATGCAGAT  
AATGTATTCAAATTACTACAAATCCAATTTTAACTCTACATACAAATAAAATATCTCAAGAGATAGCTGATGTAC  
TTCATAGTATAAAC

2676/2682  
**FIGURE 2436**

AKSITLFSAPFDTGKGKECTCQTRRNLRKDSRYGLYTLIILNNFISPSVLPNFICLTVRLYIHSYKNQTMLADK  
TERLLQGS

2677/2682  
**FIGURE 2437**

TCTGTACTCTGTGATCTCTTTTCCTTCATCCTTGCAGAAGGCTGGAAGCTTGCTTCTGGAGAAGGCTATGCACAC  
TGGGAATACAGTTGAAAACCAGGGTACCACACTCAAACGAGTGTTACTATTATGTAAGATCACCAGTCTTCTTCC  
CTCACCCAGCTTTCAGAAITCTGGCCAGAATAGAAGTGTCTTATCTAACCTGACCAGCTCAAGGTAAAAGACCTC  
AAGAATCGGACATTGGCTGTGTCTGTGTCTCCAAAGAAAATGTCCCAGTCAGCTCACCTACTGTGAAACCCATA  
TTGAATCCAGAACTTCTATTTAGTTTGIGTCCTTTTTTCTCATAAACAAATTTGTTATAGTCTTACTAAGATAT  
AATTGGCATAGAATAAACTTTACACTTAAAGTGAAAACTTGAGTTCTGAGGCATGTATATATTTCCACAGTCGC  
CACCACAGTCAGGTAATCAITCCCCTAAATTTTTTGTGCCTCCTTATCTTC



2678/2682  
**FIGURE 2438**

LYSVISFPSSLQKAGSLLLEKAMHTGNTVENQGTTLKRVLLLCKITSLPSPSFQNSGQNRSVLSNPDQLKVKDL  
KNRTLAVSVSPKKMSQSAHPTVKPILNPELLFSLCPFFLINKFVIVLLRYNWHRINFTLKVKNLSSEACIYFHSR  
HHSQVIIPLNFLCLLI

2679/2682  
**FIGURE 2439**

ATGTTGGTGAAGATGGTACTTATCTTGGTGCCCAATCCGGTCCCTGCACCGACAATGACAAGGGCAACCAGCGCC  
ACAATAATGGCGTATTCAATACCTGAGGCACCCTCGCTGCGTTTGAAGAACAGTTGCGTCTGCACGTAAAGCTTC  
ACTATCAGGTCAAGGAACATATGACTTCTCCCTAAAGCGCCACGGATTGCCGGTACGGCTCTAGCACGATCTACG  
CGGCGTGCCACTAGAGCATTGTCAACAAACCCTGGGCTCACAACCTGTAATAACGAGTTAATCACAAAGTATTAGT  
CGCAAAGTTGGCGTCATAAAACCAAGCGTTCAAGGAGGCGGATCTTTAGTTCCGGTAAATTTTTTGTGAGATAAT  
GGCATTTCGTCCTAGCTGAGCTACCTTCAAATAGCCAAATCGTTAGATGTTTCATCACAGCCAGGTTGCGAATTAA  
CTCGTTTGGATTGGCGGGACTGTAGTGCAACCGGAAAGGGAGAGCCGTCATGAACAGTCGTATCAGCATGATCCT  
GGCTGGCGTGCTGTGGTTCGGGGCGTTGATCGCGGGGTATTGGGGGCTGGTGCTGAGCCGCAACCCGCCCCCGTC  
GCCGAACCTGTCATTCTGCTGAAAAAACCGCGCTGACGCCGAAGACCAGACCCGCTCCCGGTCGTGGTGCTGGT  
GCGCGATGTGCCGCTTTCGTGGCGCTGACGAAACGACTGGCGGGGAAAAGCTGGGCACGGTG

2680/2682  
**FIGURE 2440**

MLVKMVLILVPNPVPAPTMTTRATSATIMAYSIPEAPSLRLKNSCVCT

2681/2682  
**FIGURE 2441**

CCTGATTAGTTGTGATGAATCAGCCCTTAACCTATTTCCATGGTTTGTGGAGATTGGTTCATTCTGAGTACAAT  
AGGATGGTGGGATTTTGCCTTTAATGTTCATTTTAAACAGAATTCTAGACGCAGATCTAACATTCAAACCTGAATT  
ATGTTTTCTGTTAAAAGACGGTGAAATGCTTGGATATATCCTCAGGATATGTCAGTGCTTTCTCATAAAATAAT  
GTAAGCAATAGCAATTCTTATTTGTAGAGCATTTTGTTCTGGGTGGAATCTGTGTGGTGGTTCTAGGGGCTGGAC  
CTAGGGAAAT

2682/2682  
**FIGURE 2442**

LISCDESALNLFPPWFVEIGSFLSTIGWWDFCFNVHFKQNSRRRSNIQTELCFLLKDGEMSWIYPQDMSVLCHKIM